

# River Crossings

Volume 9

January/February 2000

No. 1

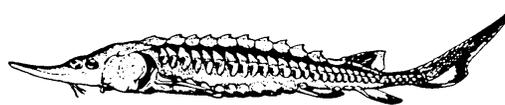
## If You Build It, They Will Come!

The first documented reproduction of pallid sturgeon in the Lower Missouri River in at least the last 30 years has been announced by U.S. Fish and Wildlife Service (FWS) biologists at the Columbia, MO Fishery Resources Office (FRO). Jim Milligan, Project Leader, said, "This discovery is evidence that the fish, whose ancestors date to the days of the dinosaurs, may have a better chance at recovery than previously believed."

Steve Krentz, leader of the *Pallid Sturgeon Recovery Team* in Bismarck, ND said that until these tiny specimens were found, the only young pallid sturgeon we have seen in the Missouri River were products of hatchery spawning operations. "We know these specimens are not the result of our stocking efforts", Krentz said, "because our hatchery stocked fish range in length from 10 to 20 in., and the specimens collected in August were less than an inch long." Positive identification of the small sturgeon was verified by Dr. Darrell E. Snyder at the *Colorado State University Larval Fish Lab* in Ft. Collins.

Pallid sturgeon historically inhabited big rivers and tributaries in Arkansas, Iowa, Illinois, Kansas, Kentucky, Louisiana, Missouri, Mississippi, Montana, North and South Dakota, Nebraska and Tennessee. The species began to decline with the advent of dams and river channelization when their habitats were altered from shallow, silty rivers with sand and gravel

bars to deeper clear channels favored by commercial boat traffic. The side channel where FWS biologists collected the small sturgeon is not a part of the navigation channel. Milligan said, "Some sturgeon still inhabit remnant habitat areas, but the



"larval pallid sturgeon"

populations are far below what they were in the 1950s and 1960s". The species was listed by the FWS as endangered in 1990, indicating a concern that it was headed for extinction.

A pallid sturgeon's life span can exceed 60 years, and an adult pallid, a rare find in any segment of the Missouri River system, can attain weights of 100 lbs. and lengths of 6 ft. The pallid sturgeon is distinguished by pale, bony plates instead of scales, it has a reptile-

like body, sucker-type mouth and large whisker-like growths that help sense its surroundings. It is similar in appearance to the shovelnose sturgeon but is much lighter in color, has smaller eyes, a longer and sharper snout and grows to much larger sizes. The pallid is also piscivorous, feeding on small fishes, while its cousin the shovelnose feeds primarily on invertebrates.

In the mid 1990s, the Missouri Department of Conservation, in cooperation with FWS biologists, began hatchery propagation to keep the species alive and ultimately stocked about 3,000 hatchery raised pallids in the lower Missouri River. Several thousand more hatchery produced fish were subsequently stocked in the upper Missouri River and in the middle and lower reaches of the Mississippi through the combined efforts of state and federal biologists. Aside from the pallid sturgeon's importance as a natural inhabitant of the Missouri and Mississippi River systems, it is considered an indicator species whose abundance and distribution is directly related to the quantity and quality of suitable habitats and riverine

## Inside This Issue

If You Build It, They Will Come	1	Miscellaneous River Issues	10
Paradox on the Missouri River	3	Heavy Metal Rain	15
Rivers In The Red	5	Dam Removal Report	16
White River Recr. vs Navigation	7	New USGS/USEPA Map Sites	16
Sturgeon Genetics	8	UMRCC/LMRCC Meeting	17
New Caviar Trade Controls	8	Annual Missouri River Conference	17
ORFMT <i>Stizostedion</i> Project	8	Meetings of Interest	17
Blue Sucker Research	9	Congressional Action	18
Agwaste Update	10		

hydrology.

Throughout the 1990's biologists focused on habitat as the limiting factor for pallid sturgeon production in the lower Missouri River because almost all of the riverine island and sandbar habitats had been eliminated by channelization and bank stabilization projects, constructed under the *Pick-Sloan Program* of the late 1940s and 1950s. Biologists were certain that if some of that habitat could be restored, sturgeon would return to the river – in other words “*if you build it, they will come*”. The problem was that all of the former island and sandbar habitat had been converted by the *Pick-Sloan Project* to dry land and subsequently claimed by adjacent landowners for farming. Vegetation was cleared, levees were built, soybeans and corn were grown right up to the river's edge, and the river was “locked” into what some have referred to as a “straightjacket” of rock revetment and levees. Nothing could be done to acquire and restore these important riverine habitats – or so it was thought until the Great Flood of 1993.

Then in June, 1993, the Missouri River “flexed it's muscles” (as rivers do), spilled over it's banks, washed out levees, cut deep scour holes, and deposited sands up to 10 ft. deep over some of the lands that had been claimed earlier for farming. The river continued to flood all summer, extending it's waters bluff to bluff on three separate occasions. By the Spring of 1994, some floodplain farms were damaged beyond repair and landowners were looking for a “way out”. Both state and federal governments were looking for ways to help these farmers, but also for ways to reduce or eliminate future disaster payments on lands which had historic records of repetitive disaster payment claims. Biologists recommended that some of these lands be acquired and placed in federal and state fish and wildlife refuges, not only to provide the opportunity for recovery of pallid sturgeon, but also as an opportunity to reduce future flooding and disaster payments by opening up the floodplain and providing more space for flood water storage and conveyance – thus improving flood protection for areas nearby. Decision makers agreed, and so the FWS's *Big Muddy National Fish and Wildlife Refuge* was born.

The fact that the small pallid sturgeon specimens collected by Columbia FRO biologists in 1999 occurred at a habitat restoration project on a unit of the *Big Muddy National Fish and Wildlife Refuge* is



*“Lisbon Bottoms side channel (photo courtesy of Dr. Jim Whiteley, Columbia, MO).”*

conclusive evidence that efforts to put back some of the 500,000 acres of habitat lost to channelization can produce dramatic results – the biologists were right – “*If you build it, They will come!*”.

Specifically, Milligan said the young pallid sturgeon specimens collected last summer were found along a restored sandbar habitat

in a side channel of the lower Missouri River (Lisbon Bottoms – see photo at left) that had been initiated by the Great Flood of 1993 and expanded to a chute-island-sandbar complex by subsequent flooding in 1995 and 1996. “This is the first new habitat of it's kind that the river has been allowed to create in well over 50 years”, Milligan said. “We acquired the land for the Refuge and gave the river some freedom to recreate some lost habitat through the natural processes of erosion, deposition and succession, and the area soon became nursery habitat for juvenile pallid sturgeon”, he said.

The most significant aspect of this find is that it clearly demonstrates we can use the river's energy to restore habitats for the benefit of threatened, endangered and declining fish species. Full recovery of the pallid sturgeon is still many years away as

## *River Crossings*

Published by

Mississippi Interstate Cooperative Resource Association  
(MICRA)  
P.O. Box 774  
Bettendorf, IA 52722-0774

### MICRA Chairman

Bill Reeves, Chairman, Tennessee Wildlife Resources Agency, Nashville

### Executive Board

Bill Reeves, Member at Large

Norm Stucky, Vice Chairman, Missouri Department of Conservation, Jefferson City

Bill Bertrand, Upper Mississippi River Conservation Committee, Rock Island, IL

Vacant, Lower Mississippi River Representative

Gordon Farabee, Missouri River Natural Resources Committee, Missouri Valley, IA

Tom Flatt, Ohio River Fish Management Team, Avoca, IN

John Rickett, Arkansas River Conservation Committee, Little Rock, AR

Bill Reeves, Tennessee River Fish Management Group, Nashville, TN

Bill Mauck, USGS, Biological Resources Division, Columbia, MO

Ron Pasch, Tennessee Valley Authority, Chattanooga, TN

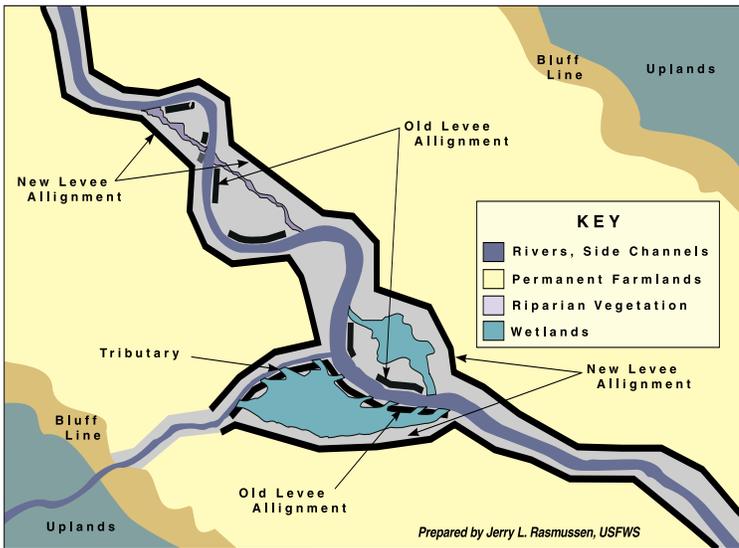
### MICRA Coordinator/Executive Secretary and Newsletter Editor

Jerry L. Rasmussen, U.S. Fish & Wildlife Service, Bettendorf, IA (309) 793-5811

MICRA email: [ijrivers@aol.com](mailto:ijrivers@aol.com)

MICRA Web Page: <http://www.waux.cerc.cr.usgs.gov/MICRA>

*River Crossings* is a mechanism for communication, information transfer, and coordination between agencies, groups and persons responsible for and/or interested in preserving and protecting the aquatic resources of the Mississippi River Drainage Basin through improved communication and management. Information provided by the newsletter, or opinions expressed in it by contributing authors are provided in the spirit of “open communication”, and do not necessarily reflect the position of MICRA or any of its member States or Entities. Any comments related to “River Crossings” should be directed to the MICRA Chairman.

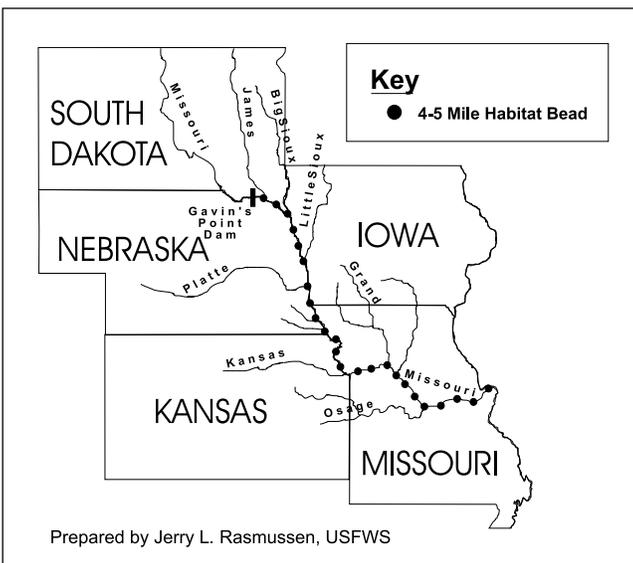


***“Restored riverine habitats or “habitat beads” provided by setting back levees and using the river’s energy to create an ever-changing mix of side channel, wetland, wet meadow, oxbow lake, and bottomland hardwood habitats.”***

much more restoration work is needed, but it could mean that the sturgeon will one day be considered for removal from the endangered species list.

But beyond the pallid sturgeon, 52 additional fish species have been documented using the restored habitat on the *Big Muddy Refuge*, as opposed to half that many found using the navigation channel. Gamefish species documented in the restored side channel include: largemouth bass, sauger, white bass, black and white crappie, channel catfish, flathead catfish, blue catfish, bluegill, green sunfish, orangespotted sunfish, paddlefish, black and

refuges in the lowest lying areas of the floodplain (i.e. those areas subject to the most frequent flooding). For the most part, these areas are then allowed to flood naturally, which in turn creates a dynamic situation of constantly changing mixes of wetland, wet meadow, woodland, side channel, and remnant lake habitats, similar to what occurred along the river before European settlement (See figure above). Scattered all along the river, restored side channels and wetlands will provide a north to south or upstream to downstream string of habitats or beads where the River’s fish and wildlife species can seek refuge from the swift currents of the mainstream to spawn or nest, feed and rear their young (See figure at left).



***“String of ‘habitat beads’ proposed along the lower Missouri River to restore ecosystem integrity while providing space for flood water storage and conveyance.***

yellow bullhead, freshwater drum, and shovelnose sturgeon.

Plans for continued restoration of the lower Missouri River are using what has become known as the *“Habitat Bead Concept”* to restore ecosystem integrity. Under this strategy, biologists are seeking to acquire strategically placed land holdings or

participating in local flood control and drainage districts with the farmers and communities who remain on the floodplain. Important side benefits of the restored habitats are the values they also provide as recreation and tourism attractions which can produce significant economic benefits to local residents and communities.

Of course there are critics, and there are growing pains that remain – some of which will continue until all the details of levee district sponsorship and local taxes can be worked out. But all of these problems can be solved by sincere and willing people. So restoration of the lower Missouri River through development of a string of state and federal refuges or habitat beads is a win-win situation for all involved, but most importantly for the endangered pallid sturgeon!

### **Paradox on the Missouri River**

The self-styled “greener” U.S. Army, Corps of Engineers now concedes that navigation produces only \$7 million of the river’s \$1.8 billion in economic benefits. But it still manages the river primarily for navigation. It does so even though the status quo has erased 90% of the Missouri’s sandbars and islands, 80% of its aquatic food and 66% of its famous catfish, not to mention the pallid sturgeon (see previous article). It does so even though the status quo makes the river much less accessible for fishing, hunting, swimming, canoeing and other recreation, which nonetheless produces 16 times the economic benefits of navigation. It does so even though the status quo may drain water away from the Mississippi, where barges provide more than 250 times the economic benefits of the Missouri. And it does so even though the Clinton administration has ruled that the status quo jeopardizes three endangered species – the least tern, the piping plover and the pallid sturgeon – and environmentalists plan to sue.

A host of critics believe that the Missouri River’s real potential – as a recreation paradise, a historic site, a wildlife habitat, even an economic engine – has been bottled up as tightly as the river itself. Someday, their dream goes, the Missouri can be the Rocky Mountains of the Plains, binding the region together – if only it weren’t managed for a few daily barges. “The Missouri is an extraordinary public resource that’s being controlled by a few private interests,” says Chad Smith, the Missouri River coordinator

Because the desired locations of these restoration areas occur in the lowest elevations of the floodplain, they are also the areas where landowners are most willing to sell. And so the entire state and federal refuge acquisition process occurring along the lower Missouri River can, and is, being implemented through acquisitions from “willing sellers”. No lands are being condemned and participating state and federal government agencies are trying to be good neighbors by

for the nonprofit group *American Rivers*. “We’ve got to have a balance.”

The Corps will never return the Missouri to the free-flowing days of Lewis and Clark – and no one wants that. But if there were ever an opportunity for a new approach, this is it: The Corps is rewriting its Missouri management plan for the first time since 1962, and the river is now the most politicized battleground in the war for the agency’s soul. Senate Minority Leader Thomas A. Daschle (SD) and other Democrats from Montana and the Dakotas are pushing the Corps to divert less water from their reservoirs during the summer recreation season, a move that would suspend navigation during those months for the first time since the Great Depression. Six Iowa conservation groups have asked Vice President Gore to weigh in on behalf of a “split season” as well. Senate Majority Leader Trent Lott (R/MS) and Sen. Christopher S. Bond (R/MO) like the status quo. Politics has always ruled the inland waterways, and on the Missouri, the running joke is that the only two unacceptable decisions for the Corps would be the status quo or any change! “Obviously, there’s been tremendous damage in the past,” acknowledges Rosemary Hargrave, the Corps’s project manager for the Missouri. “Unfortunately, when this system was built, the environmental ethic just wasn’t what it is today. The question is, what can we do now?”

The latest battle over the Missouri has been brewing since the droughts of the 1980s, when the Corps dutifully released water downstream to salvage the barge channel. That helped the few barges hauling grain and fertilizer on the lower Missouri. But it devastated the vibrant recreation industry that had developed around the scenic reservoirs behind the upper basin dams; in fact Lake Oahe ran so dry that it simply left North Dakota. Lawsuits followed, and the Corps agreed to review its Missouri “master manual.” The review became even more urgent when the U.S. Fish and Wildlife Service deemed the status quo unacceptable for endangered species.

In 1994, the Corps made a bold proposal: It would time its dam releases to mimic the old natural river. A “spring rise” would give fish their spawning cues, and form underwater sandbars. A low summer flow would keep the upper basin reservoirs full for boating and sport fishing, expose the sandbars for shorebirds, and slow down lower basin currents enough to allow

canoeing and swimming downstream. But that meant suspending navigation in the summer – the first time the Corps had ever proposed interrupting navigation on a major waterway – and flooding more floodplain farmers in the spring. And that meant a fight. “We got the snot kicked out of us,” recalls Corps spokesman Paul Johnston. The barge industry, after all, can be as potent as an untrammelled river. Its leaders are well-wired conglomerates such as *CSX*, *Archer Daniels Midland*, *ConAgra* and *Cargill*, firms that flooded federal campaigns with more than \$10 million from 1991 to 1998.

The farm lobby is also a force, and while the Missouri floats less than 2% of its host states’ grain, farmers believe – despite many academic studies to the contrary – that the mere existence of a barge channel holds down their rail rates. “We’re all sick of this Mother Nature cultism,” says Ron Blakely, who farms 1,200 acres in the floodplain near St. Joseph, Mo... Yeah, I’d like to save the fish. But . . . who’s going to save me?”, Blakely said. He is leading an effort to build a new port in St. Joseph. Corps officials have spent 5 yrs. back at the drawing board, and while they love to talk about “consensus,” this debate is almost certain to end up in court.

Environmentalists have proposed a less drastic spring rise, combined with a reduced summer flow, to replicate nature, but recreationists insist on holding water in the upstream reservoirs to support their interests. Meanwhile, the *Missouri River Basin Association* (MRBA), with representatives from all eight river states, proposed an even milder tweak maintaining navigation except in severe droughts, infuriating the green groups. Then the state of Missouri – host to 2/3 of the river’s barges – refused to endorse even those modest changes, after the Midwest barge industry group *MARC 2000* declared that any interruption of the channel would destroy what little barging there is on the Missouri. “Everybody wants to make navigation the loser in all this,” complains *MARC 2000* Director Christopher Brescia. “Look, if you think these [barge traffic] numbers are low, well, they’re not going to grow without water.”

But even the strongest backers of the inland waterway system warn that policy decisions are never made in a political vacuum. In fact, on the Missouri River late last year, the Corps was ready to endorse the near status quo plan offered by the MRBA; and

navigation was primed to continue its quiet reign as the Corps’ core Missouri mission. But the final decision was delayed after meeting with upper basin Democrats in Sen. Daschle’s office, explaining that more study was needed on the issue. “These waterway decisions are always driven by politics, and anyone who denies that isn’t being honest with themselves,” says Tom Alegretti, president of *American Waterways Operators*.

The hot buzzword along the Missouri these days is “balance”, and Sen. Bob Kerrey (D/NE), the most prominent “balance” advocate, is pushing a bill that would officially establish “fish and wildlife” as a Corps priority on par with “navigation.” “Today, we have different ideas about what’s an important use of the river,” Kerrey says. “Obviously, it’s not just barges anymore. We need to strike a new balance.” Usually, though, when Corps officials talk about “balance,” they’re thinking of new priorities in addition to barges, not instead of barges. They say their choices are not either/or; they can continue to support navigation full throttle, while helping to restore wetlands their agency has destroyed, and promoting recreation to boot. “We really think we can do it all,” says Johnston, the Corps spokesman in Omaha.

On the Missouri, that means unplugging side channels, widening some river bends, lowering and notching dikes, perhaps even removing a few – while maintaining nine uniform feet of water in the barge channel. But that will require money. Today the Corps spends only \$8 million a year on Missouri River mitigation, half what it spends shoring up the barge channel. Meanwhile, Corps officials say their waterways need billions of dollars for renovations; half their locks and dams have reached the end of their 50-yr. design lives.

“This green infusion for the Corps, it’s going to take another infusion of green, if you know what I mean,” says Corps operations chief Charles Hess. “Nothing comes for free.” Congress has already authorized five major mitigation projects on Corps-constructed waterways – the Missouri, the Upper Mississippi, the Tennessee-Tombigbee, the Snake and the Columbia – as well as dozens of smaller restoration projects. Kerrey’s bill would pump another \$320 million into the Missouri basin, funding nature-building efforts like the Lisbon Bottoms chute (see previous article), riverfront revitalization initiatives in communities such as Omaha

and Kansas City, and new Lewis and Clark interpretive centers in towns like St. Charles, Mo. And last year, Congress tripled the acreage authorized for wildlife refuges along the Missouri.

But to critics of the Corps' traditional build-anything approach, this new desire to float barges and restore rivers at the same time smacks of the hard-choice avoidance that some say is ancient history. If these barge channels are so important, they say, then the barge industry should pay more than 1/8 of the costs of maintaining and renovating them. "On most of these rivers, the economics of navigation makes no sense whatsoever," says C. Philip Baumel, an *Iowa State University* economics professor. "Of course, the politics are a completely different question." It certainly is. Today, the main reform plan circulating in Congress would not shift the costs of the underachieving system to its industrial users. Nor would it accept reformers' proposals to privatize the system's waterways – the nation's most subsidized transportation network – or shift the system's resources toward high-volume rivers. It would double the system's construction budget.

Source: Michael Grunwald, *Washington Post*, 1/10/00

## Rivers in the Red

The U.S. Army Corps of Engineers (Corps) has modified the Red River in Louisiana into a ruler-straight barge canal by building five massive dams and 150 dikes; and by armoring its banks with thousands of tons of sturdy rock revetments. The river has also been shortened by eliminating 50 mi. of serpentine riverbends; all at a taxpayer cost of \$2 billion. Domestication of the Red has made Shreveport an actual port for the first time since the steamboat era, and was supposed to spark the economic rebirth of rural northwestern Louisiana. The Corps predicted that 15,000 new barge-related jobs would go with the flow, and former Senator J. Bennett Johnston (D/LA), the project's godfather, vowed that its "positive impact would be unmatched by any other endeavor in state history."

But five years after this modern *Louisiana Purchase*, there are hardly any barges on the river. According to the Corps's own data, the Red's government-issue navigation channel has attracted almost no new barge traffic – except for barges hauling construction materials for the new channel.

The Red carries less than 0.1% of the commercial traffic on America's government-run river transport system – even though it receives a remarkable 3.4% of the system's federal funds. "We only see a barge every couple of days or so," says Joe Franklin, the work-deprived manager of the *Joe D. Waggoner Lock and Dam*, one of four Red River dams named after powerful former congressmen who helped fund the project. "It gets kind of boring up here. You sure get a lot of time to think."

Even worse, this "barge-deficiency syndrome" can be found throughout what Washington calls the "inland waterways system," the nation's 11,000 mi. network of federally manufactured and subsidized river navigation channels. Over the last century, Congress has given the Corps more than \$100 billion in 1999 dollars to "straitjacket" America's rivers for navigation. These projects have destroyed hundreds of thousands of acres of wetlands, mucking up countless bayous, oxbows, sloughs and side channels once frequented by now-endangered species. The promised trade-off was bumper-to-bumper barges, hauling vast loads of grain and coal and oil, saving money for farmers and factories and consumers, fueling explosions of economic activity in long-ignored rural backwaters. Usually, though, the barges haven't come.

On most of the 29 Corps-constructed waterways, traffic has never approached the rosy projections used to justify them. The inland waterways system floats 8% of the nation's freight, a modest but vital slice of the American economy, amounting to 630 million tons of annual barge traffic with a value of \$188 billion. But more than 90% of that traffic is carried on just four waterways: the Mississippi, Ohio and Illinois rivers and the Gulf Intracoastal Waterway. Even Corps officials concede that navigation has been a disappointment on most of the other inland arteries, from the Alabama-Coosa to the Atlantic Intracoastal, from the Kaskaskia to the Kentucky, and from the Black to the White to the Red.

"There's no question that some of these projects have not panned out the way people expected," says Joseph Westphal, senior Corps official. "There are parts of this system that are very economical. And there are parts of this system that are not." To say

the least. A forthcoming *Environmental Defense Fund* study shows that 18 of the system's 29 river segments move less than 3% of its commerce while consuming more

than 30% of its costs. The channelized Pearl River in Alabama and Mississippi carried one barge in 1997. And 15 years after the Corps dammed, diked and dredged the Ouachita River up to Camden, Ark., the publicly financed Port of Camden has yet to dock its first barge.



No one really set out to build this generously subsidized transportation network; unlike interstate highways or railroads, the nation's waterways were never systematically planned or pruned. The system is, instead, a child of Washington politics. Big public works projects are a time-honored way for congressmen to bring jobs and contracts home to their districts, and big water projects seem to enjoy a special exemption from normal legislative scrutiny. They are anathema to taxpayer activists and green groups; President Clinton's environmental officials have criticized several waterways, and earlier administrations often tried to derail local projects. But a pork-packed water bill now passes through the House and Senate every two years, and Clinton's lone attempt to shrink subsidies for the system went nowhere.

The vote-hungry politicians are not the only players who take an interest in inland waterways. Powerful barge interests have pull on Capitol Hill; the industry is dominated by such Washington-savvy conglomerates as *CSX*, *Archer Daniels Midland*, *ConAgra* and *Cargill*, well-known shippers of campaign cash as well as cargo. Lobbyists for farm bureaus, power plants, steelmakers and other industries eager for cheap freight options have pushed as well.

The result is a navigation system that costs over \$700 million a year to operate, maintain and renovate, with the barge industry covering only about 1/8 of the cost. In contrast, the trucking industry pays a much larger percentage of the nation's highway costs through gas taxes, and railroads maintain their own right of ways without federal help. "(Most barge channels) came into existence less because of sound economic analysis than because of economic boosterism and sheer porkbarrel politics," concludes the *Environmental Defense Fund* report on "low-volume"

waterways.

The Corps, a civilian-dominated public works agency with a military pedigree and a long history of reengineering the American landscape, gets its marching orders from Congress. But critics say it has also helped expand the navigation system through repeatedly inflating predictions of barge traffic. In the 1930s, the Corps forecast 12 million annual tons of commodity movements on the Missouri, then carved the undulating river into a narrow ditch. Today, the Missouri carries 1.8 million tons. The Corps was still thinking big in the 1980s, when it predicted that its \$2 billion Tennessee-Tombigbee Waterway project in Alabama and Mississippi would carry 27 million tons in its first year. That estimate was 25.3 million tons too high.

The Congressional Budget Office has called barges America's most heavily subsidized form of freight transport – "except the space shuttle, maybe," one environmentalist grouses – but they still have great difficulty competing with trucks and trains. The problems are clear: Barges are 5 mi./hr. anachronisms in a just-in-time economy. Rivers can freeze, flood or run low. And shippers have to load products onto trucks or trains just to get them to barges, unless they happen to be located directly on a river.

Then to add insult to injury, *Farm Journal* magazine predicts that a combined 25 million acre drop in total corn and soybean plantings is needed this year to bring supply and usage into alignment. The USDA and the *World Agricultural Outlook Board* also paint a dismal picture for grain producers and oil seed growers. The somber fact is that based on projected carryover totals for next September 1, corn growers could slice 14.8 million acres off of this spring's plantings because production harvested off of that much acreage will already be in the corn carryover pile. Even a major 20% cutback in corn acreage would do little more than balance the ledger sheets! Corn carryover from last year is projected at 1.994 billion bushels. And with conditions currently improving in South America, the "footing" stays slippery for months to come. Projected carryover stocks of 395 million bushels, represents a 55 day supply that will likely go unused by next September 1. What that suggests for soybeans is a 10 million acre reduction in plantings would be welcome, but unlikely. Wheat has its own

problems, and with prices hammered back to lows not seen since 1977, substitution of wheat as a feed-grain could actually work against corn. Projected carryover stocks at the end of next May indicate about 43% of usage will be left over (1.027 billion bushels) as the next summer harvest nears – it would seem that there is little need for expansion of navigation facilities on Midwestern rivers – at least for the immediate future.

So then what about the impacts of navigation on wildlife? Even Corps officials acknowledge that on many rivers – especially those tamed before the environmental movement began gaining influence in the 1970's – their navigation projects were disastrous to wildlife. Natural rivers, after all, are turbulent and complex. They rise and flood in the spring, then run low in the summer. They are shallow in some areas, deep in others. They are always in motion. All that action fosters biodiversity; different species like different parts of the river in different seasons.

Navigable rivers, on the other hand, must be calm, simple, static. Barges need 9 ft. of water, always, with no hidden sandbars or sharp turns. So the Corps has manhandled rivers into narrow, straight, stable channels. These changes can set off food chain reactions: revetments stop bank erosion, reducing the organic material in the water, hurting aquatic plants that need organic material, insects that eat aquatic plants, small fish that eat insects, big fish that eat small fish, and so on.

These impacts do not occur right away, but Paul Dickson who is writing a book about the birds of the Red River says, "The (Red) river is filling in so fast; pretty soon, this great little backwater will be nothing but a mud flat". "That's what happens when you turn rivers into ditches." Of course, no one is sure what will happen to the ecology of the channel. But the Corps may not wait to find out. It just launched a \$5 million study of a brand new project to extend navigation 135 miles beyond Shreveport, up to the poultry region around Index, AR. "This is a navigation project to nowhere – even the Corps knows that," fumes Terry Horton, director of the *Arkansas Wildlife Federation*. "It's the most appalling pie-in-the-sky idea I've ever heard. But that doesn't mean it won't happen. I've learned that lesson."

What follows then is a sampling of what has happened on other rivers:

**Kaskaskia River Project:** This river in southern Illinois was tamed to haul high-sulfur coal. The only problem is, thanks to tougher emission rules, power plants don't buy much high-sulfur coal anymore. So commodity movements are thinning fast, from 3.5 million tons in 1988 to 1.1 million in 1997. The Kaskaskia is now one of America's least efficient waterways, consuming 14 cents in maintenance costs/ton-mile of traffic. By contrast, the Mississippi consumes less 0.1 cent/ton-mile.

**Ouachita-Black rivers Project:** This \$2 billion project created a barge channel up to Camden, AR destroying 15,000 acres of forestland. So far, there has never been a barge at the *Port of Camden*, and the *Port of Crossett* downriver has docked only one. "This project was going to be better than Mom and apple pie, the new lifeblood of southern Arkansas," says Jim Johnson, director of a national wildlife refuge on the Ouachita. "It's been nothing but a bust."



**Apalachicola-Chattahoochee-Flint rivers Project:** This is the third least efficient Corps waterway, at 17 cents/ton-mile. The Corps spends about \$2 million a year dredging the Apalachicola in Florida, ravaging its oyster beds, but it rarely attracts more than one barge every 2 days.

**Kentucky River Project:** The 150 yr. old locks and dams on the Kentucky are so inefficient that even the Corps wants to get rid of them. This river would win the inefficiency contest, costing a startling 37 cents/ton-mile, if it weren't for the Pearl River, which carried only one barge, with 500 tons of cargo, in 1997.

**Tennessee-Tombigbee Project:** This \$2 billion, 10 dam project moved more earth than the construction of the Panama Canal, and destroyed 34,000 acres of wetlands. But it has never come close to expectations. The Corps predicted 27 million tons of traffic for 1985, its first year. It carried 1.7 million. The Corps also forecast 23.8 million annual tons of coal. Last year, it

floated 2.6 million. “The Tenn-Tom was going to be the gleaming light that saved the world,” says Corps navigation director Barry Holliday. “It didn’t work out that way.”

The following displays, by river, the ratio between Barge Traffic Measured in Millions of Ton-miles Transported vs Maintenance Cost Measured in Cents/Ton-Mile :

	<u>Traffic</u>	<u>Cost</u>
Lower Mississippi:	117,701	: 0.04
Middle Mississippi:	19,150	: 0.07
Ohio:	58,962	: 0.10
Gulf Intracoastal Waterway:	20,783	: 0.20
Tennessee:	6,928	: 0.20
Illinois:	8,715	: 0.26
Black Warrior:	5,801	: 0.31
Green-Barren:	343	: 0.47
Cumberland:	1,662	: 0.47
Kanawha:	1,696	: 0.48
Upper Mississippi:	16,160	: 0.55
Columbia:	843	: 0.71
Snake:	376	: 0.81
Tennessee-Tombigbee:	1,396	: 1.14
Monongahela:	1,233	: 1.19
Arkansas:	2,054	: 1.37
Missouri:	492	: 1.74
Atchafalaya:	526	: 1.79
Ouachita-Black:	226	: 2.47
White:	84	: 3.27
Red:	199	: 4.76
Atlantic Intracoastal Waterway:	325	: 5.86
Alabama-Coosa:	62	: 11.38
Kaskaskia:	21	: 14.27
Allegheny:	55	: 15.04
Willamette:	3	: 16.97
Apalach-Chat-Flint:	48	: 17.23
Kentucky:	12	: 37.31
Pearl	0	: N/A

Sources: Michael Grunwald, *Washington Post*, 1/9/00; *Environmental Defense Fund*, and Bob Coffman, *Farm Journal, Inc.*

## White River, AR Recreation vs Navigation

The White River winds through a magical expanse of bottomland hardwoods, one of the last remnants of the 24 million-acre forest that once blanketed the entire lower Mississippi Valley. William Faulkner dubbed this basin the *Big Woods*, “bigger and older than any recorded document.” Interior Secretary Bruce Babbitt called it *America’s Amazon*.

Clarendon, AR sits in the heart of this region, and this fading river town is now battling to protect the oak, ash and sweet gum of the *Big Woods* from the dikes,

dredges and jetties of the Army Corps of Engineers (Corps). The Corps is studying a plan to expand navigation on the White, a \$50 million effort to attract economic development to rural backwaters like Clarendon by deepening the river’s barge channel. But Clarendon – the mayor, the city council, even the Chamber of Commerce – is saying no thanks. At a recent town meeting to discuss the project, the vote was a stunning 74 to 2 against the project. “Nobody needs economic development more than we do, but this isn’t the way to get it,” says Clarendon Mayor Don Boshers. “All over America, the Corps has raped the countryside to make way for barges that don’t even come. We’re not going to let that happen here.”

The plan does have some support in depressed Arkansas communities like Augusta and Newport, where factories manufacturing wire products, light fixtures and outdoor furniture have shut down in recent years. But the equally depressed downriver towns of Clarendon and Brinkley have chosen to fight – not because they’re teeming with left-leaning environmentalists, but because they believe their economic futures depend on a healthy river.

This is a new twist in the war over waterways: It’s not just businessmen vs environmentalists anymore. Wildlife-related recreation – hunting, fishing, birdwatching – is now a billion dollar industry in Arkansas, enjoyed by nearly half the state’s adults. The White flows through two national wildlife refuges that receive 280,000 visitors a year; the telling sign at the entrance to Clarendon now reads “*Gateway to the White and Cache River Refuges*.” This basin is the number one flyway for mallards in North America; a recent duck calling contest in nearby Stuttgart attracted more than 50,000 visitors to that town. “They talk about all the economic benefits of those barges, but that’s all questionable,” says Perry Lee, the local banker. “The river is real. We can’t kill that golden goose.”

Supporters of the project can hardly believe the furor. The naturally deep White is much better suited for navigation than most of the previous reengineered rivers, and will require much less alteration to ensure a 9-foot barge channel. Still, it is far more controversial. The boosters believe the wingdikes will increase river traffic tenfold, converting the White from an underused, often unavailable waterway into a bustling full-time river of commerce. “We’re trying to get the word out: We’re not like those

other projects,” says Harvey Joe Sanner, an outspoken farm activist who runs the pro-barge *White River Valley Association*. “We agree, if this is bad for the environment, forget about it. But it won’t be.”

However, that’s not what the U.S. Fish and Wildlife Service (FWS) thinks. It’s predicting a disaster. The White River – which stretches from the foothills of the Ozarks in northwest Arkansas up through the country-music mecca of Branson, Mo., then back southeast through Arkansas to the Mississippi River – may be best known for a failed riverside development known as *Whitewater*. But the Lower White is also considered one of America’s best-kept natural secrets, the last pristine swath of the Mississippi’s alluvial floodplain, a diverse habitat for songbirds, waterfowl, black bears, bald eagles and 150 species of fish, as well as endangered freshwater mussels. The key to the whole ecosystem is floods, rising in spring, retreating in summer, carrying fish to their spawning grounds and exposing invertebrates for them to eat.

On rivers like the Missouri, wingdikes have disrupted those natural ebbs and flows, fundamentally unhinging the local food chain. On the White, the lower half of the barge channel would flow through national wildlife refuges, and the FWS officials running those refuges believe history will undoubtedly repeat itself. “This isn’t brain surgery,” says Larry Mallard, the director of the White River refuge. “If you mess with the connectivity of the system, you’re going to inflict some incredible damage.”

Navigation boosters grouse that the FWS just wants to depopulate and reforest the area. But even Corps official, Joseph Westphal, who visited the White last year with Interior Secretary Babbitt, says he discovered the need to “assess and reassess what we’re doing there.” “We pay to destroy precious natural resources. Then we pay to fix it down the road,” warns Steve Ellis, director of water resources for *Taxpayers for Common Sense*. “Well, here’s one last chance to say no in the first place.”

Yet the study continues, and a decision is expected this spring. In 1988, this was one of the first navigation projects ever deauthorized by Congress; then in 1996, Sen. Dale Bumpers (D/AR) got it reauthorized. The channelization vision is the same as it always has been along the inland waterways system: “*If we build it, economic development will come*”. And this area is particularly desperate for

economic development. "We all love hunting and fishing, but we've got to think about jobs," says Augusta Mayor Thomas Huie, a former highway engineer. "If this creates one job, I'm for it 100%."

Source: Michael Grunwald, *Washington Post*, 1/10/00

## Sturgeon Genetics

The long-running debate over whether the Alabama sturgeon should be placed on an endangered species list has been fanned with a genetic study's failure to identify any distinction between it and the more common shovelnose sturgeon. The study, conducted by the *National Fish and Wildlife Forensics Laboratory* in Oregon, was actually meant to use a specific DNA marker to help authorities find out when caviar is being illegally removed from endangered fish. But the marker failed to distinguish the Alabama sturgeon.

Those who have opposed listing the Alabama sturgeon as a federally protected species, including large corporations and some political leaders, are sure to be pleased with the finding. Opponents have argued that the Alabama sturgeon is not a distinct species. But U.S. Fish and Wildlife (FWS) officials said the study isn't relevant to the debate over the fate of the species, because the genetic marker used in the study isn't useful in distinguishing some species of sturgeon. They claim an overwhelming majority of experts agree that the Alabama sturgeon is at least a special population, if not a distinct species, and deserves federal protection.

"We've used the best available science," said Paul Hartfield, a FWS biologist who wrote the proposal to list the Alabama sturgeon as endangered. The FWS is expected to make a final decision on the matter in March. Mitch King, assistant regional director for the FWS in Atlanta, said in his opinion, the study is "not important at all." But the officials are adding the study to materials currently under review. And they will reopen the public comment period on the listing proposal for 30 days to hear the public's views.

The *Alabama-Tombigbee Rivers Coalition* (ATRC), composed of industries using the rivers, like utilities and wood processors, has adamantly opposed listing the Alabama sturgeon as endangered, saying that could mean new restrictions on river navigation

and the use of river water. FWS officials have said that's not true. Birmingham attorney Bill Satterfield, an ATRC spokesman, said his group is examining the new study and plans to make comments. ATRC last fall accused the FWS of pressuring the study's author, Stephen Fain, to stop his work on discerning whether the Alabama sturgeon is distinct. The group asked for an investigation by the Alabama and Mississippi congressional delegations. FWS has denied interfering with Fain's work, and a co-author of Fain's study also denied the allegations.

Fain's study basically is the same as a similar study using the same genetic marker 5 yrs. ago, Hartfield said, adding that other studies using different genetic markers showed differences between the Alabama sturgeon and the common sturgeon. Overall, he said, the research points strongly toward listing the Alabama sturgeon. Edgar Espinoza, deputy director of the Oregon laboratory, said arguing that the Alabama sturgeon doesn't exist using the new study would be "overreaching the conclusions." "It's only one analytical tool," he said.

*River Crossings* readers are referred to an article in the September/October issue entitled, *Caviar Controversy Continues*. In that article Dr. Vadim Birstein of the *American Museum of Natural History* in New York criticized the procedures used by Fain and his colleagues to identify sturgeon caviar by species.

Source: *AP Newswires*, 1/10/00

## New Caviar Trade Controls

Effective 12/6/99 the U.S. Fish and Wildlife Service announced that it will no longer issue or accept for import, export, or re-export any certificates under the Convention on International Trade in Endangered Species (CITES) for caviar predating 4/1/98. The new regulation is intended to enhance wild sturgeon conservation. An increasing international market for Caspian Sea sturgeon prompted the 146 CITES member nations to regulate as of 4/1/98, commercial trade in all sturgeon and paddlefish species and their products, including caviar, by adding the species to CITES Appendix II.

Since that date, the U.S. and its CITES partners have required that caviar importations be accompanied by CITES

permits from the exporting or re-exporting countries. By issuing these permits, countries ensure that the caviar contained in a shipment was legally acquired and that trade does not threaten the survival of wild sturgeon. Shipments in which the caviar was certified by the exporting country to have been acquired before the 4/1/98 controls, were issued special certificates attesting to that fact. The 1998 regulations also limited the amount of caviar individuals could legally bring into or take out of the U.S. to 250 grams of caviar/person/trip for personal use.

As a side benefit, the regulation also helps keep outdated caviar from reaching the marketplace. According to the sturgeon products industry, the normal shelf life for caviar is 12 mos. As of 12/6/99, the shelf life of any caviar imported before 4/1/98, would have expired. Now American caviar lovers can be confident that when they buy caviar from reputable outlets, they will be getting a fresher product. Moreover, by purchasing legally acquired caviar, consumers are supporting sturgeon conservation at home and abroad. The 12/6/99 prohibition does not affect aquaculture-produced caviar or caviar harvested from the wild after 4/1/98, which will continue to be allowed with a valid CITES permit or a valid CITES re-export certificate from the country of re-export.

For a copy of the 12/6/99 Federal Register notice, go to <http://international.fws.gov>.

## ORFMT

### Five Year *Stizostedion* Project

Based on results from the Ohio River Recreational Use Survey (Schell et al., 1996) the Ohio River Fisheries Management Team (ORFMT) has determined that the *Stizostedion* species group (walleye and sauger) is the most likely to be overexploited by sport fishermen. Consequently, this species group was selected as the topic of the ORFMT's first management project. The recreational use survey database, collected in 1992 and 1993, is comprised of catch statistics and demographic data from 28,916 angler interviews representing 50,596 Ohio River anglers. *Stizostedion spp.* represented the most likely species group to be consumed and the second largest portion of the total sport fish catch, followed only by the *Morone* basses.

During both study years a sub-sample of anglers was asked, "What types of fish did

you eat, or give away for others to eat, from the Ohio River in the last twelve months?" The perch family (of which *Stizostedion spp.* are members) ranked first in 1992 representing 32% of 2,883 respondents and second in 1993 representing 27% of 902 respondents. The recreational use survey, which covered 491 mi. of the Ohio River, documented a combined *Stizostedion spp.* catch of 759,426 fish in 1992 with 13% harvested and 27,902 fish in 1993 with 35% harvested. The survey was conducted from April to November during both years and was funded by West Virginia, Kentucky, Indiana and Ohio.

The ORFMT initiated the 5 yr. *Stizostedion spp.* project in 1998 with the goal of annually assessing selected Ohio River *Stizostedion* populations, using standardized procedures, to determine appropriate management strategies. Night electrofishing surveys are being conducted in 7 study tailwaters during spring and fall. Night electrofishing surveys for forage fish are also being conducted each fall at 6 standard sites/study pool. Winter angler surveys, targeting the study tailwater fisheries, were started in the fall of 1999 to monitor catch statistics. A comprehensive genetic evaluation (funded by MICRA) is also part of this ongoing project. This long-term database will be used to guide Ohio River *Stizostedion spp.* management activities.



- Publishing of an award winning Ohio River Fishing Guide.
- Continual work with the Corps of Engineers (COE) on providing and maintaining angler and boating access to the Ohio River.
- Development of an Ohio River Fisheries Management plan with sauger and black bass subsections.
- Coordination of paddlefish studies and management activities in conjunction with the MICRA paddlefish project.
- Assistance in coordinating state environmental agency involvement with the COE Ohio River long term planning process for COE facilities and environmental restoration projects.
- Development of an Ohio River black bass assessment project.
- Initiation of the subject multi-state Ohio River *Stizostedion* project.

For additional information on the *Stizostedion* project contact: Scott Schell, Ohio Division of Wildlife, 360 East State Street, Athens, OH 45701. Phone: 740-594-2211, FAX: 592-1626, scott.schell@dnr.state.oh.us.

For information on the ORFMT contact Scott Stuewe, Chairman, Illinois Dept. Of Natural Resources, 524 S. 2<sup>nd</sup>., Lincoln Tower Pl, Springfield, IL 62701, (217) 782-6424, FAX (217) 785-8262, sstuewe@dnrmail.state.il.us

The ORFMT, established in 1990 by Memorandum of Agreement, is made up of fisheries administrators and biologists from the 6 state (IL, KY, IN, OH, WV and PA) wildlife agencies bordering the Ohio River. Each state recognized that trying to manage a shared fishery by itself would be a daunting task. Clearly, the effectiveness of each state's fisheries management efforts could be greatly improved by pooling resources and coordinating management programs.

Notable ORFMT accomplishments to date include the following:

- Coordination of fish stockings, particularly striped bass and hybrid striped bass.
- Unification of sport fishing regulations for the mainstem of the whole river.
- Completion of a recreational use survey on nearly 500 miles of the river.

### Blue Sucker Research

Biological, population, and movement data collected on the southeastern blue sucker *Cycleptus meridionalis* in the Alabama River, AL indicate that members of this species complete an annual spawning run that may be unique among North American freshwater fishes. Dr. Maurice F. (Scott) Mettee, Director, Environmental Geology Division, Geological Survey of Alabama in Tuscaloosa reports that annual round-trip spawning runs of this species cover 150 to 350 mi. During these runs, each fish has to cross over or go through a Corps of Engineers (COE) navigational lock and dam (35 ft. crest spillway) located 60 mi. downstream of the spawning location twice – once going upstream to spawn and again when returning to summer habitat.

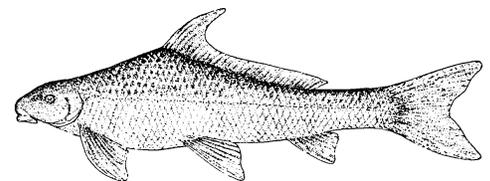
“One of the most interesting findings”,

Mettee says, “is that following spawning, several individuals have returned to inhabit the same stretch of river, sometime even the same submerged treetop, for two consecutive summers.” “Our findings have been limited to 2 one-yr. intervals because we used 14-mo. tags from 1996-98”, he said. This year, they switched to 4-yr. tags in an effort to gather additional data on individual fish over a longer time period.

“Another interesting find”, Mettee says, “is that downstream locations of sonic tagged fish are not randomly distributed.” Most have settled in one of five areas called “habitat zones”. All five “habitat zones” have been utilized across several years of study. For instance the largest zone has been inhabited by a total of 11 fish that were tagged in 1996, 1998, and 1999.

Mettee said, “We’re pretty excited about the scientific value of our data, but I also believe it might be important in future management of southeastern riverine fish species”. The Alabama River is a navigational waterway and as such portions of it are dredged annually. Mettee says the COE seems warm to the idea that these “habitat zones” should not be dredged. He said they recently began looking at ways to improve fish passage around their downstream dam during spawning runs of this and other riverine fish species. Since the Alabama River receives very little commercial traffic, Mettee suspects that the COE is concerned that the dam might become a potential candidate for removal and they really don’t want to do that!

Mettee said he has received some additional funding for 2000 to implant sonic tags in one or two additional species, just to see if their movement patterns mimic those of *Cycleptus*. He hopes to submit a manuscript describing this work to the *Transactions of the American Fisheries Society* this winter or spring. But in the meantime he would



“Blue sucker”

like to hear from other researchers on any readily available information on long migrations of other North American freshwater fish species. Dr. Mettee can be contacted at (205) 349-2852, ext 282 or by email at smettee@gsa.tuscaloosa.al.us.

## Agwaste Update

Environmentalists filed suit on 12/7/99 in North Carolina to block emergency hog waste rules that they say will increase water pollution. The lawsuit says the rules violate the law against spraying more waste as fertilizer than plants can absorb, and that the state Soil and Water Conservation Commission lacked the authority to change the standards. The *Southern Environmental Law Center* filed the suit on behalf of the *Neuse River Foundation*; the foundation's river keeper, Rick Dove; and the *Alliance for a Responsible Swine Industry*. The emergency rules were adopted in November in response to heavy rains from Hurricane Floyd and other storms that caused waste lagoons to fill to near capacity. Regulators said they were concerned that the lagoons might break, so they decided to let farmers spray more of the liquefied manure on their fields than their waste management plans allow. Meanwhile, North Carolina officials say they will pay \$5.7 million for the voluntary buyout of 15 hog farms located in flood prone areas.

The Ohio Environmental Protection Agency filed a 27-count lawsuit against *Buckeye Egg Farm* on 12/2/99 accusing the company of dumping dead chickens and other waste into an open field, polluting creeks with fertilizer and manure, burning and dumping solid waste, and building a public water system without EPA approval.

Environmentalists in Virginia's are fighting the poultry industry over how a new poultry waste law will be enforced. To protect the Chesapeake Bay and other waterways from poultry waste, Delegate Tayloe Murphy Jr. (D) sponsored legislation in 1999 requiring poultry farmers to implement manure management plans by 10/01. But he says the state Department of Environmental Quality has backed away from a plan to monitor waste after it leaves the farms and has decided not to write rules holding large processing companies responsible for safe use of the waste. The poultry industry said the proposed regulations went beyond the legislative compromise. Hobe Bauhan of the *Virginia Poultry Federation* said the industry would not have agreed to legislation extending control of poultry waste sold as fertilizer. But Murphy, environmentalists and others say the regulations are needed to provide performance standards for processors and make the new law effective.

Iowa governor Tom Vilsack (D) "reopened

an old wound" in mid January by saying control over the location of large hog farms should be returned to county officials. Lawmakers and former Gov. Terry Branstad (R) took control of livestock facilities in 1998, saying Iowa should not have a "hodgepodge" of zoning laws and building codes that affected farmers differently in each county. Vilsack said, "We pride ourselves on the local control of schools... Aren't these local officials just as qualified to make decisions about their environment?" Lawmakers pledged to re-examine the issue this session. But House Speaker Brent Siegrist (R) said, "We have struggled with this for some time. Unless the governor has new proposals, I don't know that anything will happen."

Sources: *AP/Columbia [SC] State*, 12/8/99; Henderson/Horan, *Charlotte Observer*, 11/17/99; Brent Israelsen, *Salt Lake Tribune*, 12/9/99; Andrew Welsh-Huggins, *AP/Cleveland Plain Dealer* online, 12/2/99; Greg Edwards, *Richmond Times-Dispatch*, 12/13/99; Mike Glover, *AP*, 1/4/00; Perry Beeman, *Des Moines Register*, 1/12/00; Chris Clayton, *Omaha World-Herald*, 1/12/00; and *Greenwire*, A National Journal Daily Briefing, 11/18, 12/2, 12/9, 12/13/99; and 1/6 and 1/12/00

## Miscellaneous River Issues

**Road Salt** - Concerns about the use of salt to keep roads clear of ice are on the rise again in New Hampshire because of a finding that salt used on Interstate 93 has contaminated a nearby lake. Research by the *Institute of Ecosystem Studies* found that chloride concentrations in Mirror Lake has risen 10-fold since 1976, when a stretch of I-93 near the lake was opened. A nearby stream's concentration was 100 times what it was in 1976. If it gets high enough, chloride levels can harm aquatic life and some plants. The most commonly used road salt is sodium chloride. New Hampshire Dept. of Transportation (DOT) officials say they would prefer to make physical changes to that stretch of I-93 rather than switch to an alternate deicer. DOT may install new curbing, culverts and drains to divert runoff from the stream and lake. But Brian Mrazik of the USGS said the physical changes amount to "not getting rid of the salt, just putting it somewhere else." Mrazik says using alternative deicers would be better for the environment. Sources: Robert Braille, *Boston Globe*, 12/5/99; and *Greenwire*, A National Journal Daily Briefing, 12/6/993

**Kentucky Environmental Education** - A *Kentucky Environmental Education Center* (KEEC) report says that Kentucky schools should do more to encourage environmental education. KEEC director Jane Eller said, "We spend a lot of money on environmental remediation, cleaning up water, and air and land, and we could spend a fraction of that doing education and save a lot of money." The report, which was based on a 2 yr. study, offers 20 recommendations for improving environmental education statewide, for both adults and school-age children. The committee that wrote the recommendations consisted of representatives from state government, environmental groups, school districts and energy coalitions. Eller hopes Gov. Paul Patton (D) will find funding for the recommendations in 2000. Recommendations included creating a statewide network to coordinate various agencies' work in environmental education, making environmental education part of teacher certification, hiring a full-time environmental specialist at the state Department of Education and surveying the environmental literacy of the general population every 5 yrs. Meanwhile, a statewide poll conducted by the *University of Kentucky Survey Research Center* for the KEEC found that 96% of residents think environmental education should be taught in schools. And 95% said it is possible to have a strong economy while protecting the environment. The survey also found that 80-95% of people knew that the ozone layer protects against ultraviolet rays, knew to store nuclear waste underground and that paints, acids and pesticides were considered hazardous wastes. But nearly 40% think that coal, oil, iron and other metals are renewable resources, and another 40% think "biodiversity" means a "multitude of opinions on environmental issues."

Sources: Linda B. Blackford, *Lexington Herald-Leader*, 12/21/99; and *Greenwire*, A National Journal Daily Briefing, 12/21/99

**Clark Fork River Contamination** - Low trout populations in the upper Clark Fork River in Montana are more likely to have been caused by acute rather than chronic exposure to mining and smelting-related pollution, according to a USEPA document released in mid December. The *Clark Fork River Ecological Risk Assessment* says "time-limited" events such as thunderstorms damage the river more than the steady impact of metals pollution. Acute events cause "pulses" of pollution that can kill fish and other aquatic life, while chronic pollution is considered less lethal. Debate between state and federal officials over

whether chronic or acute pollution has the more serious effect on water quality delayed the release of the risk assessment – part of the federal Superfund process – for more than a year. The findings are expected to have ramifications for negotiations between state environmental regulators and *Atlantic Richfield Co.*, who is considered responsible for paying Superfund cleanup costs at the Clark Fork River Superfund “operable unit.” The “operable unit” includes the river and its 100-year flood plain between the river’s headwaters and the Milltown Reservoir near Missoula. Sources: Duncan Adams, *Montana Standard/Billings Gazette*, 12/20/99; and *Greenwire*, A National Journal Daily Briefing, 12/20/99

**Acid Rain** - Six coal-burning power plants in the tri-state region of Ohio, Indiana and Kentucky emitted almost four times the amount of toxic chemicals into the air in 1998 than 174 local manufacturers combined, according to a new report by the *Greater Cincinnati Chamber of Commerce*. The chamber’s annual toxics release inventory found that overall, regional manufacturers cut their emissions by 8%, but the emissions of the six coal-burning plants are “not likely to decline soon.” Bob McElfresh of *Cinergy Corp.*, which owns four of the plants, said the company has no plans to install scrubbers and that the plants are “within national air quality standards.” Environmentalists say the report confirms their “long-held belief” that old power plants should be replaced with modern ones. Ned Ford of the *Sierra Club’s Ohio chapter* said, “Ohio does have the authority to do something about the power plants. The problem is there’s no political will.” The report comes as the federal government and several Eastern states are suing power plants in the Midwest and South for not upgrading their equipment and contributing to acid rain pollution problems in the East. Sources: Tim Bonfield, *Cincinnati Enquirer*, 1/12/00; and *Greenwire*, A National Journal Daily Briefing, 1/12/00

**Rio Grande Lawsuit** - Six environmental groups filed suit on 11/15/00 to force the federal government to take steps to help the endangered Rio Grande silvery minnow and the southwestern willow flycatcher. The groups hope their lawsuit will lead to improvement in the Rio Grande ecosystem in central New Mexico, where the river has been “dramatically” altered by dams and irrigation diversions. It asks for biological studies of the minnow and flycatcher, which environmentalists say will force officials to leave more water in the river for both

species. The groups say federal water managers should exercise more control of dams and diversions on the river. But federal officials say they have little control over the dams, irrigation and water. Control of those areas lies with water users such as the *Middle Rio Grande Conservancy District* and the city of Albuquerque, federal water managers say. They contend that a solution should be found through talks among water managers, users and environmentalists. Sources: Mike Taugher, *Albuquerque Journal*, 11/16/99; and *Greenwire*, A National Journal Daily Briefing, 11/18/99

**Fossil Creek Restoration** - *Arizona Public Service Co.* (APS) said on 11/16/99 that it will shut down a pair of hydroelectric plants on Fossil Creek at the end of 2004, marking the first time a “significant” stretch of an Arizona river will be restored to its natural state. When the plants are decommissioned, the restored water flow along 14 mi. of Fossil Creek is expected to provide a natural refuge for threatened and endangered native fish and allow for new bald eagle nesting sites. Ed Fox, an APS vice president, called the move “simply the right business decision and the right environmental decision.” The plant shutdowns were negotiated with APS by five environmental groups: the *Center for Biological Diversity*, *American Rivers*, *Nature Conservancy*, *Sierra Club* and *Audubon Society*. Mindy Schlimgen-Wilson of *American Rivers* said, “APS has set an extraordinary example of public responsibility with its commitment to restore Fossil Creek”. Sources: Steve Yozwiak, *Phoenix Arizona Republic*, 11/18/99; *American Rivers* release, 11/17/99; and *Greenwire*, A National Journal Daily Briefing, 11/18/99

**Truckee River Fish Ladder** - The U.S. Bureau of Reclamation plans to construct a fish ladder at the Derby Dam on Nevada’s Truckee River so two fish species can make their way to spawning grounds. The goal of the \$2 million project is to help rejuvenate populations of endangered cui-ui fish and threatened Lahontan cutthroat trout. Steve Alcorn, BLM deputy area manager, said the fish ladder will not affect water levels and is “one step toward a long-term goal of removing fish” from protected status. Rose Strickland of the *Sierra Club* said, “I really do see the fish ladder as a shot in the arm in the effort to try to restore the Truckee River ecosystem”. Sources: Christine Dorsey, *Las Vegas Review-Journal*, 1/7/99; and *Greenwire*, A National Journal Daily Briefing, 1/7/00

**Yellowstone Bioprospecting** - The National Park Service (NPS) confirmed details last week of a 1997 agreement allowing a California biotechnology company to collect and commercialize microbes from Yellowstone National Park hot springs. In the deal, *Diversa Corp.* would pay the NPS 0.5% of the net sales of any commercial products produced from park microbes, 3% of the net sales of research-related products based on the genetic codes of park microbes, and 8% of net sales of native enzymes purified from cultured microorganisms discovered in the park. The agreement levies the highest royalties on products most closely connected to actual park microbes. Three nonprofit groups sued the NPS in 1997 to force the release of the royalty amounts and to block the bioprospecting agreement. A federal judge has suspended the agreement with *Diversa* and ordered the NPS to complete an environmental impact statement of the effects of bioprospecting on national parks. John Varley, chief of the *Yellowstone Center for Resources*, the park’s resource management branch, said work on the document should begin late this winter with the publication of an initial notice in the Federal Register. A decision on the “larger legal question” of whether the NPS can legally allow the commercial collection of living organisms from a national park is expected in the next few months. Sources: Michael Milstein, *Billings Gazette*, 1/11/99; and *Greenwire*, A National Journal Daily Briefing, 1/11/00

**Ohio River Fertilizer Spill** - Cleanup crews recovered nearly 25% of 379,500 gallons of nitrogen fertilizer spilled from a ruptured storage tank near the Ohio River on 1/8/00. As a precaution, officials placed 2,000 ft. of boom in the river to contain the fertilizer and emptied 1.5 million gallons of oil and fertilizer from adjacent tanks at *Southside River Rail* in Riverside, OH. The impact on river life is unknown, but Dale Farmer of the Ohio EPA said the fertilizer is nontoxic. The biggest concern is the possible rupture of a tank containing 500,000 gallons of potentially flammable base oil, which Farmer said would be difficult to clean up if it reached the river. Sources: O’Neill/Weathers, *Cincinnati Enquirer*, 1/10/00; and *Greenwire*, A National Journal Daily Briefing, 1/10/00

**Pennsylvania Growing Greener Initiative** - The state Senate approved on 11/16/99 a \$623 million version of Gov. Tom Ridge’s (R) “*Growing Greener*” Initiative, which would fund farmland preservation, the cleanup of polluted streams and other

environmental projects. Sources: George Strawley, *AP/Pittsburgh Post-Gazette*, 11/17/99; and *Greenwire*, A National Journal Daily Briefing, 11/18/99

**Iowa Water Initiative** - Governor Tom Vilsack (D) unveiled on 1/4/00 the *Iowa Water Initiative*, an effort that will use voluntary programs and incentives for landowners to clean state waterways. The \$13.86 million initiative targets 159 polluted state waterways, where Vilsack hopes to encourage more farmers to create buffers around their fields to reduce runoff, which Vilsack said could make the state eligible for as much as \$65 million in federal funding. Then on 1/12/00 Gov. Vilsack made a "sweeping" call for environmental, educational and health care improvements as he outlined a \$4.9 billion budget in his *Condition of the State* address. Vilsack called on lawmakers to support his *Water Initiative*, saying that in combination with conservation reserve programs, it could bring farmers as much as \$53.3 million in federal funding. Sources: Mike Glover, *AP*, 1/4/00; Perry Beeman, *Des Moines Register*, 1/12/00; Chris Clayton, *Omaha World-Herald*, 1/12/00; and *Greenwire*, A National Journal Daily Briefing 1/6 and 1/12/00

**Runoff Precedent** - A recent order to clean up a polluted waterway in Orange County, CA, is the first enforcement action singling out urban runoff by a city, county or government agency and could trigger a crackdown of California and federal water quality laws, environmentalists say. The *San Diego Regional Water Quality Control Board* issued an order on 12/28/99 requiring Orange County, the city of Laguna Niguel and the county's Flood Control District to stop storm drain runoff from polluting Aliso Creek. Storm drains bring trash, chemicals, petroleum products and animal waste from lawns and streets into regional waterways, including the ocean. Runoff is the suspected cause of a 2 mo. closure of Huntington Beach, which "paralyzed" the city's economy. Mark Gold, director of *Heal the Bay*, called the order "very significant." Gold said, "The regional board is finally using the regulatory tools it has available to ensure water quality is protected." Previously, environmental efforts focused on obvious sources of pollution such as sewage treatment plants and factories, said Art Coe, assistant executive officer of the water board. Sources: Seema Mehta, *Los Angeles Times*, 1/5/00; and *Greenwire*, A National Journal Daily Briefing, 1/5/00

**Black Mountain Acquisition** - Kentucky officials signed an agreement on 12/30/99 to buy mineral and timber rights for the top of Kentucky's highest peak, Black Mountain, to save it from mountaintop removal mining. The cost is estimated at \$7.7 million. Sources: Judy Jones, *Louisville [KY] Courier-Journal*, 12/31/99; and *Greenwire*, A National Journal Daily Briefing, 1/6/00

**U.S. Wildlife Refuge Woes** - More than 200 national wildlife refuge managers say the refuge system needs a new leadership structure or it should be removed from the U.S. Fish and Wildlife Service (FWS). In a survey released on 12/15/99 by *Public Employees for Environmental Responsibility* (PEER), managers said the nation's 521 refuges "suffer from poor leadership, inadequate staffing and low funding." They said Congress should hold hearings on the system's future. Nearly 90% of managers who responded said wildlife refuges do not adequately compete for staff and funds within the FWS. About 60% of managers expressed support for a proposal calling for a refuge "chief" in the FWS at the deputy director level and a line of budgetary command flowing to regional officers. Thirty-four percent endorsed the idea of creating a separate agency for refuges within the Interior Department. Sixty-one percent of refuge managers responded to the survey. Dan Ashe, who oversees the refuge system, said he was "disappointed" in the survey results. Ashe said, "The refuge system right now is going through one of the best periods of time it has ever seen." But environmentalists say the system is poorly promoted to taxpayers. Evan Hirsche of the *National Audubon Society* said, "Refuges are commonly referred to as the black-sheep federal land system." Sources: *AP/Milwaukee Journal Sentinel*, 12/16/99; *PEER* release, 12/15/99; and *Greenwire*, A National Journal Daily Briefing, 12/16/99

**Canada Rejects ND Water** - While the rest of Canada moves to ban bulk exports of water to the U.S., Manitoba is taking "hydronationalism" one step further and rejecting a plan that would send North Dakota's excess water to the province. Manitoba Premier Gary Doer said, "We don't want their water. Why don't they sell it to California?" Despite the opposition, the U.S. Army Corps of Engineers is "marching ahead" with a \$110 million plan to ease the flooding of North Dakota's Devils Lake by draining water into the Red River, which flows into Canada. North Dakota Gov. Edward T. Schafer (R) said he

expects to start the 18-month project next fall and dismissed Canada's complaints about receiving the state's excess water. To ease Manitoba's concerns about flooding, North Dakota said it would agree in writing not to release water downstream during flood times. And the governor's counsel, Robert Harms, said the drainage would meet water quality provisions of international treaties. But Manitoba worries about the consequences of introducing non-native aquatic life to the Red River watershed, especially Lake Winnipeg, the world's 10th largest freshwater lake and home to a \$17 million-a-year fishing industry. The case is expected to go before "what is essentially North America's highest water court," the *International Joint Commission*, which resolves disputes over the Boundary Waters Treaty of 1909. Sources: James Brooke, *New York Times*, 12/6/99; and *Greenwire*, A National Journal Daily Briefing, 12/6/99

**Canada Moves To Block Water Shipping** - Canadian Foreign Minister Lloyd Axworthy introduced legislation in November that would effectively ban large-scale water exports from the Great Lakes and other boundary waters between the U.S. and Canada. The legislation would prohibit bulk shipping in an attempt to "ensure the country's environmental health for generations to come." Axworthy said a ban on shipping of water rather than on exports of water was proposed because of NAFTA concerns. An export ban could be open to trade challenges, but a policy based on environmental protection would not violate world trade laws. Axworthy said, "It's very important that we put in place the tools we need to ensure that Canadians will control their fresh water resources in an effective way." In addition to the Great Lakes, the ban would affect the Lake of the Woods and St. Croix River. A similar policy affecting most Canadian waters is being discussed by federal and provincial officials. Sources: David Ljunggren, *Reuters/PlanetArk*, 11/23/99; Edward Alden, *Financial Times*, 11/23/99; Sue Bailey, *Canadian Press/Vancouver Sun*, 11/23/99; and *Greenwire*, A National Journal Daily Briefing, 11/23/99

**First Agricultural Wetland Mitigation Bank** - The nation's first agricultural wetland mitigation bank for farming activities is being established on a 73-acre site in southeast Missouri. The mitigation bank is a pilot project of the *American Farmland Trust's* (AFT) *Agricultural Conservation Innovation Center* with assistance from USDA's Natural Resources Conservation Service (NRCS). The purpose

of a wetland mitigation bank is to consolidate wetland restoration projects to serve as compensation for several small, scattered wetland losses. Through the bank, producers who want to convert farmed wetlands on their property to non-wetlands have the opportunity to purchase wetland credits. These producers do not mitigate on their own farms for the wetland conversion, but on land that is part of the mitigation bank. Each acre of restored wetland is equal to one wetland credit. "This is the result of a partnership effort to find innovative solutions to pressing agricultural issues, including wetlands," said NRCS Chief Pearlie S. Reed. NRCS will provide technical assistance to restore the wetlands that make up the mitigation bank and will hold the permanent conservation easement to ensure that the property is protected in perpetuity. In the Missouri pilot project, the landowner of the mitigation banking site has agreed to restore on his farm a 73-acre wetland complex that is currently cropland. Funds for the restoration— including a 7-acre berm enclosing the wetland – will come from money paid into the mitigation bank by producers who purchase wetlands credits to satisfy Federal and state permit requirements. The landowner at the mitigation site will be responsible for long-term management, maintenance, and taxes on the property. Other members of the Missouri interagency committee that oversees potential wetland impacts related to the pilot mitigation bank include the U.S. Army Corps of Engineers, the Environmental Protection Agency, U.S. Fish and Wildlife Service, Missouri Department of Natural Resources, and Missouri Department of Conservation. Source: *PR Newswire*, 1/7/00

**Rivers in Trouble Worldwide** - More than half of the world's rivers are drying up or are polluted, according to the *World Commission on Water for the 21st Century*. The damaged waterways created 25 million environmental refugees last year, which for the first time exceeded the number of war-related refugees. That number could quadruple by 2025, said Ismail Serageldin, commission chairman and World Bank vice president for special programs. Serageldin said, "Overuse and misuse of land and water resources in river basins in both advanced industrial countries and developing countries constitute the primary cause for their decline." The report cited the Amazon in South America and the Congo in sub-Saharan Africa as the healthiest of the 500 major rivers in the world because they have few industrial centers near their banks. But

elsewhere, rivers are "seriously depleted and polluted," mainly because of a lack of coordination in managing watersheds, which often cross national or state boundaries. Geologist and commission consultant Arienne Naber said, "We have to pay attention to how the world manages its water... All the success stories show that cooperation leads you everywhere." The commission will present the final report and an action plan at a world forum of government ministers at The Hague, Netherlands in March. Sources: *World Water Vision release*, 11/29/99; *AP/USA Today/others*, 11/29/99; and *Greenwire*, A National Journal Daily Briefing, 11/29/99

**Record \$35 Million Pollution Settlement** - *Koch Industries* agreed to pay \$35 million on 1/13/00 for leaking oil into waterways, in the biggest civil fine ever levied under the Clean Water Act. The United States sued Koch in 1995 and 1997, claiming its pipelines leaked 3 million gallons of oil into waterways in TX, OK, KS, AL, LA and MO. The settlement cited 300 leaks from 1990 to 1997 by the Wichita, KS-based company, which is one of the country's largest oil pipeline operators. Most of the spills were caused by corroded pipelines in rural areas. The government said *Koch* could have prevented the problems with proper operation and maintenance. The settlement, filed in U.S. District Court in Houston, resolves those complaints, as well as 11 more recent spills not included in the lawsuit. Texas, which joined the suit in 1997, will receive about half of the money. The share is the biggest payment ever recovered by the state for environmental violations. A 90,000-gallon Texas spill caused a 12-mile oil slick on Nueces and Corpus Christi bays, covered migratory birds with oil and killed thousands of fish. Under the settlement, *Koch* must pay a \$30 million fine, spend \$5 million on environmental projects in affected states and improve its pipeline maintenance, which federal officials estimate could cost up to \$90 million. EPA Administrator Carol Browner said, "You pollute, you pay. It's that simple." Browner "portrayed *Koch* officials as obstinate negotiators unwilling to accept responsibility" for the spills and "complained that regulators were unable to obtain a complete map of *Koch's* 35,000 mi. pipeline network until the consent decree was signed." *Koch* officials "bristled at those characterizations." *Koch* spokeswoman Mary Beth Jarvis said the company maintained its systems properly and had reduced the number of spills by 96%. Jarvis said *Koch* has spent \$980 million on

environmental improvements since 1990. Sources: H. Josef Hebert, *AP/Boston Globe/others*, 1/14/00; Justice Department release, 1/13/00; Pete Slover, *Dallas Morning News*, 1/14/00; John J. Fialka, *Wall Street Journal*, 1/14/00; Traci Watson, *USA Today*, 1/14/00; David Ivanovich, *Houston Chronicle*, 1/14/00; Matthew L. Wald, *New York Times*, 1/14/00; and *Greenwire*, A National Journal Daily Briefing, 1/14/00

**White River (IN) Fish Kill** - In mid January Indiana Gov. Frank O'Bannon (D) asked for help from three federal agencies (FBI, USEPA and the Justice Dept.) in the investigation of a "catastrophic" mid December White River fish kill. O'Bannon called it the worst fish kill in state history, and asked the agencies to look into potential violations of the Clean Water Act as investigators tried to determine who was responsible. EPA officials, already investigating the incident, were focusing on an Anderson, IN, plant run by *Guide Corp.*, an automotive parts maker. Environmentalists complained that the state had responded too slowly and failed to keep the public informed. State officials conceded that they should have responded sooner. More than 85 tons of dead fish reportedly piled up along a 50 mi. stretch of the White River. The catfish, bass, sunfish and other species died between Anderson and Indianapolis along the river, which supplies 60% of the drinking water to 800,000 people in and around Indianapolis. "It is like someone dropped a nuclear bomb," said Josh McDermott, who lives near the river. "The fish had jumped 6 or 7 ft. onto the shore. It was like they were jumping out of the water to try and get away from whatever it is." State environmental officials believe the deaths began when sodium dimethyldithiocarbamate, or DMDK, entered Anderson's wastewater treatment plant in mid-December and killed microbes needed to break down ammonia from raw sewage. Then, environmental officials said, the high levels of ammonia and carbon disulfide, a by-product of DMDK, were released into the river. Both chemicals are dangerous to aquatic life, but state officials said the contamination never posed a threat to people. Ten industrial companies in Anderson filter their waste through the treatment plant, but only one – *Guide Corp.* – uses DMDK, according to the Department of Environmental Management. *Guide* officials denied responsibility for the contamination, but said they halted all discharges from its plant on 12/19 upon learning of the fish kills. Even if *Guide* is not responsible, it could be fined up to

\$50,000 for twice refusing to allow state environmental inspectors inside its plant. On 1/12/00 state officials had to obtain a search warrant to go inside the plant to question employees and examine records. *Guide* spokesman Raquel Bahamonde said the company simply wanted to “ensure it can reasonably and responsibly comply with the department’s continued requests for information without disrupting its business.” *Guide* and the state weren’t the only ones to come under fire. The Anderson wastewater treatment plant also was criticized for allowing a week to pass before reporting elevated levels of ammonia in discharge material. Sources: Tina King, *Indianapolis Star*, 1/12/00; David Rohn, *Indianapolis Star*, 1/5/00; Rick Callahan, *Associated Press Newswires*, 1/12/00; and *Greenwire*, A National Journal Daily Briefing, 1/5, and 1/12/00

**Fertilizer May Be Killing Frogs** - Fertilizer standards for drinking water that the USEPA deems safe for human consumption can kill some species of frogs and toads, according to a new study published in the journal *Environmental Toxicology and Chemistry*. Researchers from *Oregon State University* (OSU) said some tadpoles and young frogs raised in water containing low levels of nitrates often found in fertilizer runoff ate less, developed physical abnormalities, suffered paralysis and eventually died. Levels of nitrates considered safe for human drinking water killed more than half of the Oregon spotted frog tadpoles after 15 days of exposure. In control tanks with normal water, none died. Thus, EPA water quality criteria does not guarantee survival of some endangered amphibians, OSU researcher and professor of zoology Andrew Blaustein said. “I think this is clearly a significant problem,” he said. “Right here in the Pacific Northwest we’re having localized extinctions of some amphibians and widespread declines in others. We now have clear evidence that nitrate and nitrite exposure at levels considered safe for humans or fish is enough to kill amphibians.” The OSU scientists worked with five species of amphibians, including the Oregon spotted frog, red legged frog, western toad, Pacific treefrog and northwestern salamander. In the past 40 yrs. the Oregon spotted frog has disappeared from most of its known historical range in lowlands with intensive agricultural use. The Oregon



spotted frog was the most sensitive to environmental levels of nitrates and nitrites – three to four times more vulnerable than red legged frogs and Pacific treefrogs. Levels of nitrite considered safe for human drinking water killed over half of the Oregon spotted frog tadpoles after 15 days of exposure. All five species showed a similar number of deaths at levels of nitrites that were higher, but still well below those that the USEPA considers safe for warm water fishes. The study indicates that EPA water quality criteria does not guarantee the survival of some protected and endangered amphibians, the authors said. Fertilizer runoff may also fuel algae blooms that feed parasitic flatworms, which may cause deformities in frogs, the scientists said. The question Blaustein asks is: “Are you comfortable drinking water with levels of fertilizer that kills off frogs?” EPA plans to review the study. Sources: *AP/Portland Oregonian* online, 1/6/00; *ENS News Service*, 1/5/00; and *Greenwire*, A National Journal Daily Briefing, 1/6/00

**Dry Flood Control Reservoir** - A “gigantic” dam built to protect 3 million Southern California residents from potentially deadly floods was dedicated on 1/7/00 amid concerns from environmentalists. The \$420 million Seven Oaks Dam, located in the foothills of the San Gabriel Mountains, is part of a \$1.5 billion effort to lessen the effects of “catastrophic” floods along the Santa Ana River. But environmentalists are worried the dam could turn into a semi-permanent reservoir, jeopardizing flood control objectives and destroying habitat. Several water districts in the river’s drainage area are seeking state permission to use the dam for a so-called “conservation pool” of water that could be used to recharge the area’s groundwater during the spring. The Army Corps of Engineers says more environmental review is needed. Environmentalists say creating such a pool, even if only temporarily, would lead to habitat loss, would decrease the flood control benefit of the dam and could harm native fish. Steve Evans of *Friends of the River* said, “If you really need the flood control, then that dam should remain empty”. Sources: *AP/Idaho Falls Post Register*, 1/9/00; and *Greenwire*, A National Journal Daily Briefing, 1/10/00

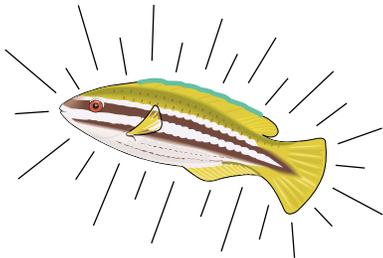
**Religion and the Environment** - The “green” voice of Orthodox Christian Church Patriarch Bartholomew of Constantinople

“has been getting louder”. Calling pollution a “sin” and a “sacrilege,” the spiritual leader of the world’s 200 million Orthodox Christians “has made the fight against pollution official church policy.” Aides say the patriarch’s environmental message is part of his plan to “modernize” his church and unify a church “full of rivalries and national rifts.” The Orthodoxy consists of 15 independent national churches and Bartholomew does not have the ecclesiastical power to impose his views on member churches. As “first among equals” though, “he can set the agenda and provide a forum for discussion.” Meanwhile, the Los Angeles Episcopal Diocese has launched an environmental activism campaign in an effort to make parishioners more concerned about preserving the Earth’s resources. The six-county diocese, which has 147 parishes and 85,000 members, adopted a resolution on 12/4/99 calling for a year-long study and urging a “just and fair trading system for both people and the environment.” The resolution said, “Unbridled capitalism, selfishness and greed cannot continue to be allowed to pollute, exploit and destroy what remains of the earth’s indigenous habitats.” Sources: Marlise Simons, *New York Times*, 12/6/99; *AP/San Francisco Chronicle/Examiner* online, 12/6/99; and *Greenwire*, A National Journal Daily Briefing, 12/6/99

**At-Risk Wildlife Petitions Banned** - “After losing lawsuit after lawsuit to environmental groups over endangered species listings,” the Interior Department says it will no longer accept outside petitions to list at-risk wildlife already being considered for protection. The Tucson-based *Center for Biological Diversity* is challenging the decision in court. The group has successfully filed lawsuits to protect various species when the U.S. Fish and Wildlife Service (FWS) failed to meet legal deadlines for responding to petitions to list them. The FWS said in a legal notice in October that it considers such petitions redundant because the agency is already considering them for listing. Interior Secretary Bruce Babbitt said, “Rather than looking at redundant petitions, with the limited resources we have, we would rather look at initial petitions (filed on behalf of species not considered candidates.)” Environmentalists say such petitions are often the only way to protect at-risk species. Kieran Suckling of the *Center for Biological Diversity* said, “Species get stuck in bureaucratic limbo, insulated from citizen action.” And Michael Bean of the DC-based *Environmental Defense Fund* agreed that the FWS “sometimes sits on a species listing

proposal to avoid making potentially difficult decisions” that could limit activities such as logging, grazing and development. But Nancy Gloman, chief of the FWS’s endangered and threatened species division, said the decision will not significantly limit citizens’ ability to pressure federal officials on listing species. The agency is legally required to review the status of all candidates annually, she said, and anyone can challenge its decisions in court or sue if the FWS fails to conduct the review. Sources: Tony Davis, *Tucson Arizona Daily Star*, 1/11/00; and *Greenwire*, A National Journal Daily Briefing, 1/12/00

**“Glowing” Fish to Detect Pollutants -** *University of Cincinnati* researchers say a study they are conducting could lead to the use of “glowing” zebrafish to identify



pollutants in drinking water supplies. Thanks to firefly genes inserted into their DNA, the zebrafish light up when exposed to PCBs. The fish would cost less than current testing methods and would be much more sensitive. The zebrafish are not harmed and lose the glow when they are removed from polluted water. Researcher Daniel Nebert said he became interested in the concept after hearing that enzyme levels in some fish off the coast of Nova Scotia increased as they neared an oil slick. Researchers plan to test the concept at Lake Harsha in Clermont County, located east of Cincinnati. The lake is a few miles from a closed hazardous waste landfill and provides a “significant” amount of the county’s drinking water. Sources: Lisa Cornwell, *AP/Cleveland Plain Dealer* online, 12/16/99; and *Greenwire*, A National Journal Daily Briefing, 12/17/99

**The Right To Sue Upheld by Court -** The Supreme Court on 1/12/00 upheld the right of citizens groups to sue alleged polluters for violations of federal law. The 7-2 decision gives environmentalists one of their “biggest legal victories” of the past 20 yrs. The court’s ruling is expected to have a “major impact” because citizen suits against alleged polluters often exceed the positions government regulators have pursued. Ruling in a Clean Water Act suit filed by *Friends of the Earth* against a South

Carolina hazardous waste incinerator now owned by *Safety-Kleen Corp.*, the court rejected the argument of business groups and conservative legal organizations that only government agencies can enforce the law. The groups also said such cases should be dismissed if a company has stopped the alleged violation. The court returned the case to a lower court, overturning an appeals court decision that had dismissed it.

Writing for the court, Justice Ruth Bader Ginsburg said cases could only be dismissed if it were clear that the alleged illegal conduct could not reasonably be expected to reoccur. But in a dissenting opinion, Justice Antonin Scalia said the Clean Water Act’s citizen suit provision “turns over to private citizens the function of enforcing the law.” Scalia said the court’s decision “has grave implications for democratic governance.” Justice Clarence Thomas joined in the dissent. Sources: *Justice Department release*, 1/12/99; Henry Weinstein, *Los Angeles Times*, 1/13/00; Bloomberg, *Salt Lake Tribune*, 1/13/00; *AP/Milwaukee Journal Sentinel*, 1/13/00; Linda Greenhouse, *New York Times*; and *Greenwire*, A National Journal Daily Briefing, 1/13/00

**LMRV Tree Planting -** *American Electric Power* (AEP) and several other utilities have been recognized by Theodore Roosevelt IV and the U.S. Fish and Wildlife Service for planting trees on refuges in the lower Mississippi River region. *UtiliTree Carbon Co.*, (UTCC) a consortium comprised of AEP and 40 other utilities, was recognized for its sponsorship of more than 2,400 acres of reforestation on marginal farmland on four national wildlife refuges in the Lower Mississippi River Ecosystem as part of its *Global Climate Challenge Program*. The utilities’ efforts will help reduce greenhouse gases in the atmosphere through carbon sequestration, the conversion of carbon dioxide gas into plant material. The projects will also significantly improve biodiversity on the refuges by reestablishing habitat for Louisiana black bears, peregrine falcons, migratory neotropical birds and waterfowl. “The reforestation project is one of the many ways AEP will continue to demonstrate its respect for the environment as well as its commitment to protect and enhance the environment,” said Gary Kaster, AEP’s forestry and recreation programs supervisor and UTCC chief executive officer. UTCC was established in 1995 by 41 utilities to finance projects that seek to control carbon dioxide through domestic and international forestry projects, such as tree planting. The nonprofit company has committed over \$2.5 million to finance the

projects. AEP, a global energy company, is one of the largest investor-owned utilities in the U.S., providing energy to 3 million customers in Indiana, Kentucky, Michigan, Ohio, Tennessee, Virginia and West Virginia. Source: *PR Newswire*, 1/10/00

## Heavy Metal Rain

Mercury isn’t just a worry in lakes any more, precipitation is now distributing the horribly toxic nerve poison to every ecosystem in the world. For six years Gary Glass, senior scientist at the USEPA crisscrossed Northern Michigan, Wisconsin and North Dakota, sleuthing rainfall for one of the most dangerous nerve toxins in existence. Rain throughout his area, just adjacent to the Canadian border, contained large and rising amounts of deadly mercury. Rain, he says, is definitely not pristine, even in remote areas far from industrial development. The acutely toxic nerve poison has now been distributed by precipitation and air currents to every ecosystem – from heavily industrialized parts of North America to pristine Arctic regions. But while other man-made air pollution threats, such as global warming and acid rain, have received vast attention, the widespread distribution of mercury hasn’t. Research conducted by Glass found that mercury levels rose 8% per yr. from 1990 to 1995. Average mercury levels of his samples are 14 times greater than water taken from unpolluted Lake Superior. Glass’ research is providing an explanation for the surprising levels of mercury – estimated at 2-5 times those of pre-industrial times – being found around the world and sparking fears that the heavy metal contamination could have devastating effects.

Mercury is no ordinary pollutant. It’s a persistent neurotoxin that cannot be destroyed. It harms nerves and could affect the intelligence of children, and could poison wildlife for decades to come. Its most damaging type – an organic form known as methylmercury – attacks the developing fetus with particular fury. Children born to women exposed during pregnancy exhibit a variety of developmental neurological abnormalities, such as delayed onset of walking and talking, cerebral palsy, altered muscle tone and reduced neurological test scores.

Mercury can remain in the environment for decades, falling as rain near its source or drifting thousands of kilometres away and

contaminating distant lakes, streams and oceans. People are most likely to ingest organic mercury when they eat fish. Rain and snow wash mercury out of the atmosphere, depositing it in lakes, in the ocean and on land. Mercury can vaporize and enter the atmosphere. Bacteria convert inorganic mercury into highly toxic organic mercury and back again. Mercury cannot decompose but it can be trapped in sediments. Erosion, however, can release this inert mercury back into the environment. Mercury can settle back into sediment. Organic mercury can enter the food chain when tiny organisms are eaten by larger ones, and through this process it becomes more concentrated. Levels are highest in fish at the top of the chain like tuna and bass.

Mercury sources range from coal-fired power plants to the incineration of municipal waste to chemical production and mining. Together, they spew tons of the silvery grey metal into the atmosphere annually. Experts are most worried about coal, which contains trace amounts of mercury that are unlocked whenever the fuel is burned. That concern is heightened because coal is the largest single North American source of the heavy metal. And unlike other sources that have been subjected to control measures or are being eliminated, mercury emissions from coal-fired power plants aren't regulated in either Canada or the U.S.

Because of the health risks, mercury has been removed from paints and most batteries (two former big uses), while hospitals are trying to eliminate the metal, perhaps best known to the public because it is a liquid at room temperature and forms the active ingredient in mercury-based thermometers. Small quantities of mercury are used in fluorescent lights, but even for this use, manufacturers are trying to reduce the amount contained in each tube. There is no scientific dispute about the hazards of high mercury exposure.

Some of the larger and long-lived ocean fish, such as shark, tuna and swordfish, are starting to accumulate levels of mercury that are of concern, as well as gamefish from many North American waters. Canadian authorities quietly set a new recommended limit last year for women and children that could put them over the limit by eating a few mouthfuls of fish, perhaps as little as 60 grams of fresh tuna, or the amount typically added to a tuna sandwich. The Canadian standard for women of child-bearing age

and children under 10 was set at 0.2 micrograms of mercury/kg of body weight/day. Men were left at 0.47 micrograms. Daily ingestion level considered safe by USEPA is 0.1 micrograms/kg of body weight. A microgram is only a millionth of a gram.

Canadian Wildlife Service researchers estimate that 30% of the lakes in central and northern Ontario have fish with mercury concentrations that exceed the threshold for reproductive impairment in loons. Mercury contamination is the leading reason many



fish caught in North America are no longer safe to eat. More than 97% of the approximately 2,600 advisories against eating

gamefish caught in Canada are for mercury contamination. In the U.S., 40 states have issued advisories warning anglers that mercury levels in some fish are so high that the catches from more than 50,000 bodies of water contain so much mercury that they are a serious health hazard. Because it bio-accumulates, or becomes more concentrated at each step in the food chain, mercury can reach levels in the tissues of top fish predators that amounts a million times that in the water column.

Environmental consultant Adele Hurley, who helped spearhead Canada's efforts to control acid rain in the 1980s, says there was awareness that coal plants had other dangerous emissions during the battles over acid rain, but they weren't the priority. "Ms. Hurley, the former Canadian co-chairwoman of the *International Joint Commission*, quit the international body two years ago over the suppression of a report that warned that deregulation of North America's electricity industry could cause mercury emissions to surge as power companies sparked up their dirtiest coal-fired plants to battle for market share. With these plants causing smog, acid rain and greenhouse gases, in addition to mercury pollution, Ms. Hurley believes society should phase them out, just as lead in gasoline or ozone-damaging refrigerants were deemed too dangerous to use.

Sources: U.S. Environmental Protection Agency. Clean Air Network; and Martin

Mittelstaedt, *The Globe and Mail Metro*, 1/13/00

## Dam Removal Report

A new report by *American Rivers, Friends of the Earth* and *Trout Unlimited* highlights 26 case studies of dam removals as "outstanding examples of efforts to improve America's rivers." The report said 465 dams have been removed nationwide since 1912, but there has been no comprehensive review of the impact of those removals. Among the cases discussed are two dams removed by the Minnesota Department of Natural Resources (MDNR) in the mid-1990s that were blocking the Kettle and Cannon rivers. Craig Regalia, the MDNR's dam safety supervisor, said in both cases it was safer and cheaper to remove the dams than refurbish them. "Basically, the dam removal thing is kind of catching hold nationally. For the older dams that are on streams, that are deteriorating and that aren't useful anymore, the thing to do is to take them out instead of fix them up," Regalia said. The MDNR has removed six dams since 1984 and lists 20 or 30 more for future consideration. The report also points to the Little Miami River in Ohio as a "repeat success story." The river is now free-flowing after dam removals in 1984 and 1997. The Little Miami "shows that dam removal can be a low-cost solution to restoring a river, restoring fish and making the river a safer, more enjoyable place for people," said Sara Johnson, national spokeswoman for *Trout Unlimited*. The full report is available at <http://www.amrivers.org> and <http://www.tu.org>. Sources: Dennis Lien, *St. Paul Pioneer-Press*, 12/13/99; Ben L. Kaufman, *Cincinnati Enquirer*, 12/13/99; and *Greenwire*, A National Journal Daily Briefing, 12/13/99

## New USGS/USEPA Map Sites

The USGS has launched the first online *National Atlas*, which allows users to create their own maps that combine demographic, environmental, geographic, geological and biological data from federal agencies. For example, a user can create a map showing the nation's waterways overlaid with data on toxic releases or Superfund sites. *National Atlas* is available at [www.atlas.usgs.gov](http://www.atlas.usgs.gov).

USEPA's *EnviroMapper* delivers environmental and regulatory information via the Web, including data on water quality, toxic releases, hazardous waste and Superfund sites. The EPA spends \$400

million each year collecting data from regulated agencies and is now posting that information on the Web to make it available to environmental activists, corporations and concerned citizens, not just EPA personnel. The EPA estimates that accessing the information directly from its Web server will save the agency \$5 million a year. *Enviro Mapper* is available at [www.epa.gov/enviro/html/em.index.html](http://www.epa.gov/enviro/html/em.index.html).

Sources: *Government Executive*, 12/99; and *Greenwire*, A National Journal Daily Briefing, 12/7/99

### Joint UMRCC/LMRCC Meeting

The first joint meeting of the Upper Mississippi River Conservation Committee (LMRCC) and the Lower Mississippi River Conservation Committee (LMRCC) will be held in Cape Girardeau, MO on March 20-22. This meeting (the first of its kind) marks a milestone in cooperation between these two multi-state organizations. The meeting agenda includes a keynote address by Interior Secretary Bruce Babbitt, as well as presentations by Senator Christopher Bond (R/MO), Major General Phillip Anderson (COE Lower Mississippi Valley Division), Brig. General Gerald Galloway (Retired), USFWS Regional Directors Sam Hamilton (Region 4) and William Hartwig (Region 3), as well as several technical presentations. The UMRCC was formed in 1945 by state conservation agencies in response to continued pressure to develop the Upper Mississippi River for commercial navigation. The LMRCC, formed in 1992, was patterned after the UMRCC, but also includes state water quality agencies.

Contact: Gordon Farabee, MO. Dept. of Conservation, (573) 751-4115, [farab@mail.conservation.state.mo.us](mailto:farab@mail.conservation.state.mo.us); or Ted Crowell, KY Dept. of Fish & Wildlife Resources, (502) 564-3596, [Ted.crowell@mail.state.ky.us](mailto:Ted.crowell@mail.state.ky.us).

### 4<sup>th</sup> Annual Missouri River Natural Resources Conference

The 4<sup>th</sup> annual Missouri River Conference will be held at the Radisson Inn in Bismarck, ND on May 21-24. This year's theme, the *Missouri River: It's Everybody's Business*, acknowledges that everyone has a stake in how the river is managed and encourages participation by people with diverse river interests. Sessions at the conference will focus on:

- North Dakota's geology and paleontology, prehistory, Native American cultures, recent history, biological resources, and current uses;
- education and how scientific information can be presented to the public, including *Discover a Watershed: the Missouri*, a new grade school learning guide;
- flood plain development, including presentations from Federal, State, and local representatives;
- technical papers covering both the upper and lower river on topics such as sediment transport, habitat rehabilitation, tributary



influences, and fish and wildlife status and trends; and

- management issues including presentations various organizations such as the Mni Sose Intertribal Water Rights Coalition, the U.S. Army Corps of Engineers, North Dakota Resource Management Program and the South Dakota Corridor Program.

Tours are also scheduled for early arrivals on Sunday to look at management challenges and opportunities in the Missouri River, Garrison Reach; the present day site of the Lewis and Clark Interpretive Center; and Fort Mandan, winter quarters in 1804-5 for the *Lewis and Clark Corps of Discovery*. A Sunday night social will be held aboard the Lewis and Clark steamboat on a river tour and on the deck of *Merrweather's Restaurant* overlooking the river.

Other attractions include performances from Three Affiliated Tribes singers and dancers and Keith Bear, a Mandan Hidatsa Sioux flutist, storyteller, actor, flutemaker, and dancer who recorded *Echoes of the Upper Missouri*. Many of the stories and songs he performs are more than 300 years old. Also, Robert Schneider, author of *Unruly River*, will present a long historical view of social, political, and economic forces that influenced the Missouri River environment from before Euro-American settlement through modern development projects.

Registration is \$95 before May 1 and \$120 after May 1. Contact: Greg Power, North Dakota Game and Fish Department, (701) 328-6323; web page <http://infolink.cr.usgs.gov/Events/00.htm>

### Meetings of Interest

**Mar 20-23: UMRCC/LMRCC Joint 2000 Meeting, Holiday Inn, Cape Girardeau, MO.** Contact: Gordon Farabee, MO. Dept. of Conservation, (573) 751-4115, [farab@mail.conservation.state.mo.us](mailto:farab@mail.conservation.state.mo.us); or Ted Crowell, KY Dept. Fish & Wildlife Resources, (502) 564-3596 or [Ted.crowell@mail.state.ky.us](mailto:Ted.crowell@mail.state.ky.us)

**Mar. 24-28: North American Wildlife and Natural Resources Conference, Hyatt Regency O'Hare, Chicago, IL** Contact: Richard McCabe, (202) 371-1808

**Apr. 4-6: International Hazardous Material Spills Conference, Regal**

**Riverfront Hotel, St. Louis, MO.** Contact: <http://www.nrt.org/hazmat2000>

**Apr. 17-18: MICRA Paddlefish/Sturgeon Meeting, Holiday Inn Westport, St. Louis, MO.** Contact: Kim Graham, (573) 882-9880, [grahal@mail.conservation.state.mo.us](mailto:grahal@mail.conservation.state.mo.us)

**Apr. 17-18: MICRA Aquatic Nuisance Species Committee Meeting, Holiday Inn Westport, St. Louis, MO.** Contact: Jay Rendall, (651) 297-1464, [jay.rendall@dnr.state.mn.us](mailto:jay.rendall@dnr.state.mn.us)

**Apr. 18: MICRA Gamefish Committee**

**Meeting, Holiday Inn Westport, St. Louis, MO.** Contact: Scott Gritters, (319) 252-1156, [guttfm@netins.net](mailto:guttfm@netins.net)

**Apr. 18-19: MICRA Executive Board Meeting, Holiday Inn Westport, St. Louis, MO.** Contact: Jerry Rasmussen, (309) 793-5811, [ijrivers@aol.com](mailto:ijrivers@aol.com)

**Apr. 19-20: Asian Carp Workshop, Holiday Inn Westport, St. Louis, MO.** Contact: Jim Milligan, (573) 876-1911, [jim\\_milligan@fws.gov](mailto:jim_milligan@fws.gov)

**Apr. 25-28: Ecology and Management of Tailwaters in the U.S. Conference,**

**Wahweap Marina, Lake Powell, AZ.**  
Contact Barbara Ralston, (520) 556-7455,  
Bralston@flagmail.wr.usgs.gov.

**May 2-6: AQUA 2000, "Responsible Aquaculture in the New Millennium", Acropolis Convention Centre, Nice, France.** Contact: John Cooksey, worldaqua@aol.com

**May 21-24: Missouri River Management: It's Everybody's Business, Radisson Inn, Bismarck, ND.** Contact: Roger Collins, (701) 250-4492, roger\_collins@fws.gov, <http://infolink.cr.usgs.gov/events/00.htm>

**May 23-25: Sustainability of Wetlands and Water Resources Conference, University of Mississippi, Oxford, MS.** Contact:

**Marjorie M. Holland, (601) 232-5874, mholland@olemiss.edu**

**July 17-21: EISORS (Eight Internat'l. Symposium on the Ecology of Regulated Rivers) - River Restoration, Toulouse, France.** Contact: CESAC/CNRS, 29, rue Jeanne Marvig, 31055 Toulouse Cedex 04, France, Phone: 33-5 62 26 99 60, FAX: 33-5 62 26 99 99, [www-cesac.cemes.fr/~eisors](http://www-cesac.cemes.fr/~eisors)

**July 23-26: International Congress on the Biology of Fish, Aberdeen, Scotland.** Contact: Don D. MacKinlay, Fisheries & Oceans Canada, (604) 666-3520, FAX (604) 666-6894, e-Mail: MACKINLAYD@PAC.DFO-MPO.GC.CA or <http://www.fishbiologycongress.org>

**Aug. 20-24: 130th Annual Meeting of the American Fisheries Society, Adam's Mark Hotel, St. Louis, MO.** Contact: Betsy Fritz, (301) 897-8616, ext. 212; [bfritz@fisheries.org](mailto:bfritz@fisheries.org)

**Aug. 20: MICRA Paddlefish/Sturgeon Committee Meeting, Adam's Mark Hotel, St. Louis, MO (held in conjunction with the 130th AFS Mtg.).** Contact Kim Graham, MO Dept. of Conservation, (573) 882-9880, FAX (573) 882-4517, email: [grahal@mail.conservation.state.mo.us](mailto:grahal@mail.conservation.state.mo.us)

**Aug. 21-24: Black Bass 2000 Symposium, Adam's Mark Hotel, St. Louis, MO (held in conjunction with the 130th AFS Mtg.).** Contact: David Philipp, philipp@uiuc.edu or Mark Ridgway, [ridgwama@pogov.on.ca](mailto:ridgwama@pogov.on.ca)

## Congressional Action Pertinent to the Mississippi River Basin

---

### Endangered Species Act Amendments

**H.R. 3160: D. Young R/AK and 31 cosponsors.** Reauthorizes and amends the Endangered Species Act of 1973.

### Environment

**S. 352: State and Local Government Participation Act of 1999, C. Thomas, R/WY and H.R. 2029: G. Radanovich, R/CA.** Amends the National Environmental Policy Act (NEPA) of 1969 requiring Federal agencies to consult with State, county, and local agencies and governments on environmental impact statements.

**S. 481: Environmental Crimes and Enforcement Act of 1999, C.E. Schumer, D/NY.** Provides for protection of government employees and the public from environmental crimes.

**S. 1066: P. Roberts, R/KS.** Amends the National Agricultural Research, Extension, and Teaching Policy Act of 1977 to encourage use of and research into agricultural best practices to improve the environment, and for other purposes.

**S. 1090: J. Chafee, R/RI and H.R. 2956: F. Pallone D/NJ and 30 co-sponsors.** Reauthorizes and amends the Comprehensive Environmental Response, Liability, and Compensation Act of 1980.

**S. 1279: R. Kerrey, D/NE.** Improves environmental quality, public use and appreciation of the Missouri River and

provides additional authority to the Army Corps of Engineers to protect, enhance, and restore Missouri River fish and wildlife habitat.

**S. 1426, T. Harkin (R/IA), T. Daschle (D/SD), P. Leahy (D/VT), R. Kerrey (D/NE), K. Conrad (D/ND), and T. Johnson (D/SD) :** Amends the Food Security Act of 1985 to promote the conservation of soil and related resources, and for other purposes.

**S. 1622: B. Lincoln (D/AR), B. Frist (R/TN), M. Landrieu (D/LA), T. Hutchinson (R/AR), J. Breaux (D/LA), and R. Durbin (D/IL).** Provides economic, planning, and coordination assistance for the development of the lower Mississippi River region.

**H.R. 408: C. Peterson, D/MN.** Amends the Food Security Act of 1985 to expand the number of acres authorized for inclusion in the Conservation Reserve Program (CRP).

**H.R. 525: Defense of the Environment Act of 1999, H.A. Waxman, D/CA.** Requires any Congressional provision that reduces environmental protection to: (1) identify and describe the provision, (2) assess the extent of the reduction, (3) describe actions taken to avoid the reduction, and (4) recognize any statement of the Comptroller General in assessing the reduction.

**H.R. 728: K. Lucas, D/KY.** Amends the Watershed Protection and Flood Prevention Act providing cost share assistance for rehabilitation of structural measures

constructed as part of water resource projects previously funded by the Secretary of Agriculture.

**H.R. 3448: J. Greenwood R/PA, C. Dooley D/CA, S. Boehlert R/NY, and E. Tauscher D/CA.** Improves management of environmental information and encourages innovation in the pursuit of enhanced environmental quality

### Hydropower

**S. 740: L. Craig, R/ID and E. Towns, D/NY.** Amends the Federal Power Act to improve hydroelectric licensing processes by granting the FERC statutory authority to better coordinate participation of other agencies and entities, and for other purposes.

### Property Rights

**S. 333: P. Leahy, D/VT, H.R. 598: R. Santorum, R/PA, and H.R. 1950: S. Farr, D/CA.** Amends the Federal Agriculture Improvement and Reform Act of 1996 to improve the farmland protection program.

**S. 1028: O. Hatch, R/UT.** Simplifies and expedites access to Federal courts for parties whose rights and privileges, secured by the Constitution, have been deprived by actions of Federal agencies, entities or officials acting under color of State law.

**S. 1202: B.N. Campbell, R/CO.** Requires a warrant of consent before land inspections may be carried out to enforce any law

administered by the Secretary of the Interior.

**H.R. 1002: Declaration of Taking Act,, D. Hunter, R/CA.** Amends the subject act to require that all government condemnations of property proceed under that Act.

**H.R. 1142: D. Young, R/AK.** Ensures that landowners receive equal treatment to the government when property must be used.

**H.R. 2550: T. DeLAY (R/TX).** Compensates owners of private property for the effect of certain regulatory restrictions.

#### Public Lands

**S. 338: B.N. Campbell, R/CO; S. 568: C. Thomas, R/WY and H.R. 154: J. Hefley, R/C.** Establish fee systems for commercial filming activities on public lands.

**S. 446: B. Boxer, D/CA.** Provides for permanent protection of U.S. resources in the year 2000 and beyond.

**S. 510: B.N. Campbell, R/CO and H.R. 883: D. Young, R/AK.** Preserves U.S. sovereignty over public and acquired lands, and preserves state sovereignty and private property rights in non-federal lands surrounding public and acquired lands.

**S. 532: D. Feinstein, D/CA and H.R. 1118: T. Campbell, R/CA.** Increases funding to resume state grant funding for the Land and Water Conservation Fund and development of conservation and recreation facilities in urban areas under the Recreation Recovery Programs.

**S. 826: C. Thomas, R/WY.** Limits federal acquisition of lands located in States where 25% or more of the land in the State is owned by the U.S.

**S. 1049: F. Murkowski, R/AK, and H.R. 1985: B. Cubin, R/WY.** Improves administration of oil and gas leases on Federal lands, and for other purposes.

**H.R. 488: Northern Rockies Ecosystem Protection Act of 1999, C. Shays R/CT.** Special designation of lands in the states of ID, MT, OR, WA, and WY.

**H.R. 1199. R.W. Pombo, R/CA.** Prohibits expenditure of Land and Water Conservation Funds for new National Wildl. Refuges without Congressional authorization.

**H.R. 1207: B.F. Vento, D/MN.** Prohibits the U.S. government from entering into

agreements related to public lands without Congressional approval.

**H.R. 1284: Minnesota Valley Refuge Bill, D. Young, R/AK.** Protects the Minnesota Valley National Wildlife Refuge and protected species to ensure that scarce refuge land in and around the Minneapolis, MN metro area are not subjected to physical and auditory impairment.

**H. R. 1396: C. McKinney, D/GA.** Saves taxpayers money, reduces the deficit, cuts corporate welfare, and protects and restores America's natural heritage by eliminating the fiscally wasteful and ecologically destructive commercial logging program on Federal public lands, and facilitates the economic recovery and diversification of communities dependent on the Federal logging program.



**H.R. 1500: J. Hansen, R/UT.** Accelerates the wilderness designation process by establishing a timetable for completion of wilderness studies on Federal lands.

**H.R. 2222: G. Miller, D/CA.** Establishes fair market value pricing of Federal natural assets, and for other purposes:

**H.R. 3245: D, Young R/AK and G. Miller D/CA.** Establishes a fund to meet the outdoor conservation and recreation needs of the American people; provide Outer Continental Shelf impact assistance to State and local governments; amend the Land and Water Conservation Fund Act of 1965, the Urban Park and Recreation Recovery Act of 1978, and the Act popularly known as the Federal Aid in Wildlife Restoration Act.

#### Regulations

**S. 746: Regulatory Improvement Act of 1999, S.M. Leven, D/MI.** Improves the ability of Federal agencies to use scientific and economic analyses to assess cost-

benefits and risk assessments of regulatory programs.

**H.R. 1864: J. Hansen, R/UT.** Standardizes public hearing processes for Federal agencies within the Dept. of the Interior.

**H.R. 1866: J. Hansen, R/UT.** Provides a process for the public to appeal certain decisions made by the National Park Service and the U.S. Fish & Wildlife Service.  
**Tennessee Valley Authority**

**S. 123: TVA Funding Act, R.D. Feingold D/WI.** Phases out Federal funding for the Tennessee Valley Authority.

#### Water Resources

**S. 685: M. Crapo, R/ID and H.R. 2456. M. Simpson, R/ID.** Preserves state authority over water within their boundaries and delegates states the authority of Congress to regulate water.

**S. 1659: C. Burns R/MT and H.R. 2974: R. Hill R/MT.** Conveys the Lower Yellowstone Irrigation Project, the Savage Unit of the Pick-Sloan Missouri Basin Program, and the Intake Irrigation Project to the appurtenant irrigation districts.

**S. 1762: P. Coverdell R/GA and B. Lincoln AR.** Amends the Watershed Protection and Flood Prevention Act authorizing the Secretary of Agriculture to provide cost share assistance for the rehabilitation of structural measures constructed as part of water resources projects previously funded by the Secretary under such Act or related laws.

**H. Con. Res. 86: E. Blumenauer (D/OR).** Concurrent resolution expressing the sense of Congress regarding Federal decisions, actions, and regulations affecting water.

**H.R. 2984: B. Barrett R/NE.** Directs the Secretary of the Interior to convey to the Loup Basin Reclamation District, the Sargent River Irrigation District, and the Farwell Irrigation District, NE, property comprising the assets of the Middle Loup Division of the Missouri River Basin Project, NE.

**H.R. 3002: D. Young R/AK.** Provides for the continued preparation of certain useful reports concerning public lands, Native Americans, fisheries, wildlife, insular areas, and other natural resources-related matters, and to repeal provisions of law regarding terminated reporting requirements

concerning such matters.

## Water Quality

**S. 20: Brownfield Remediation and Environmental Cleanup, F.R. Lautenberg D/NJ.** Directs EPA to establish a grant program for States and local governments to inventory and conduct site assessments of brownfield sites. Defines brownfield sites as facilities suspected of having environmental contamination that could limit their timely use and can be readily analyzed.

**S. 188: R. Wyden, D/OR.** Amends the Federal Water Pollution Control Act (FWPCA) to authorize use of the revolving loan funds for construction of water conservation and quality improvements.

**S. 493: P. Sarbanes, D/MD.** Requires the U.S. Army, Corps of Engineers to conduct pilot projects on toxic microorganisms in tidal and non-tidal waters.

**S. 669: P. Coverdell, R/GA.** Amends the FWPCA to ensure compliance by Federal facilities with pollution control requirements.

**S. 914: B. Smith, R/NH and H.R. 828: J. Barcia, D/MI.** Amends the FWPCA requiring discharges from combined storm

and sanitary sewers to conform to the *Combined Sewer Overflow Control Policy* of the USEPA.

**S. 968: B. Graham, D/FL.** Authorizes USEPA to make grants to States for water source development to maximize the supply of water and protect the environment through development of alternative water sources, and for other purposes.

**S. 1787: M. Baucus D/MT, B.N. Campbell R/CO, and T. Daschle D/SD.** Amends the FWPCA to improve water quality on abandoned or inactive mined land.

**H.R. 155: Municipal Biological Monitoring Use Act, J. Hefley, R/CO.** Amends the Clean Water Act.

**H.R. 684: Farm Sustainability and Animal Feedlot Enforcement Act, G. Miller, D/CA.** Amends the Clean Water Act.

**H.R. 1290: W.B. Jones, R/NC.** Amends the FWPCA related to wetlands mitigation banking.

**H.R. 1549: P. Visclosky, D/IN.** Amends the FWPCA to establish a National Clean Water Trust Fund to carry out projects to

restore and recover U.S. waters from damages resulting from FWPCA violations.

**H.R. 1578: J. Hostettler, R/IN.** Amends the wetland conservation provisions of the Food Security Act of 1985 and the FWPCA to permit unimpeded use of privately owned crop, range, and pasture lands that have been used for the planting of crops or the grazing of livestock in at least 5 of the preceding 10 years.

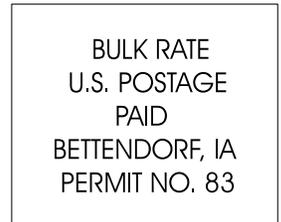
**H.R. 1712: B. Stupak, D/MI.** Amends FWPCA to authorize an estrogenic substances screening program.

**H.R. 2328: J. Sweeney, R/NY.** Amends the FWPCA to reauthorize the Clean Lakes Program.

**H.R. 2449: C. Norwood, R/CA.** Amends the FWPCA relating to Federal facilities pollution control.

**H.R. 2957: D. Vitter R/LA and W. Jefferson D/LA.** Amends the FWPCA to authorize funding to carry out certain water quality restoration projects for Lake Pontchartrain Basin, LA.

Source: Congressional Affairs Update, USFWS, 6/2, 6/25, 7/23, 9/25, 10/1, 10/8, 10/22, 10/29, 11/12 and 11/19/99



ADDRESS SERVICE REQUESTED

